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THE MAGAZINE OF THE ROYAL ONTARIO MUSEUM

volume 35:number 2
2002/2003 winter

Exploring Walpole's Wetlands

Traditional knowledge and "Western" science team up to study the rich ecosystems of this First Nation territory

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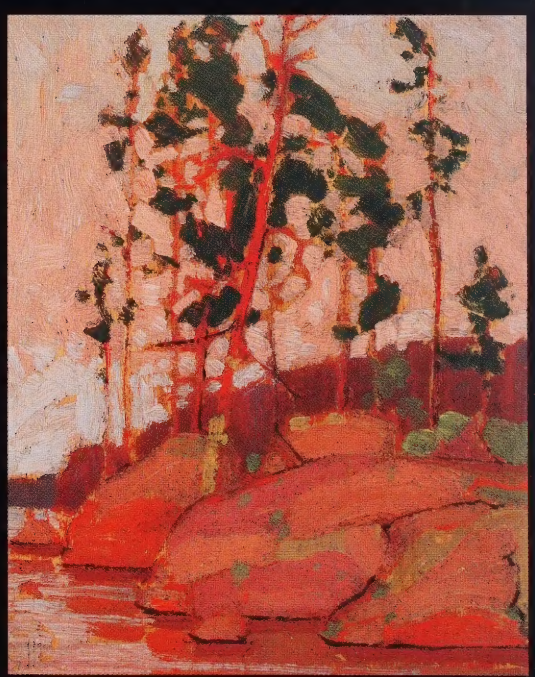

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CONTENTS

Volume 35, Number 2, Winter 2002 / 2003

FEATURES

12 **Designing Woman**
Haute couture designer—and social climber nonpareil—Marie-Jeanne "Rose" Bertin attracted an elite 18th-century clientele that included the queens of France, Spain, and Sweden.
By Kimberly Chrisman-Campbell

20 **Where the Waters Divide**
Traditional knowledge and "Western" science team up to explore the rich ecosystems of Walpole Island First Nation.
By Deborah Metsger, Michael Williams, and Erling Holm

32 **The Remarkable Legacy of Robert Cruickshank**
Innovative in fashion and astute in business, an 18th-century master silversmith created works of singular splendour.
By Ross Fox

DEPARTMENTS

4 Explorations
Diamond rival; monkeying with names; trilobites; a severed-head cult

7 Libris
Book reviews: Decor, Design, Desire. By Glen Ellis

9 Backyard Biodiversity
High Hopes for the Tallgrass Prairie.
By Mary Burridge and Deborah Metsger

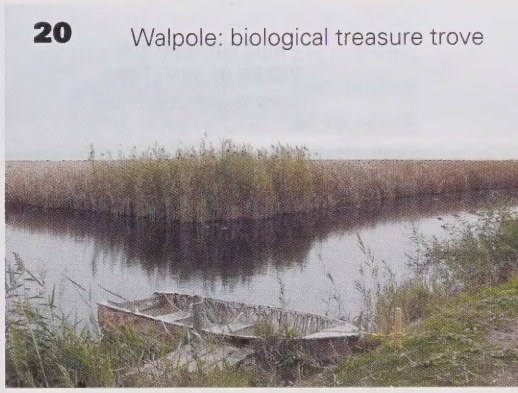
41 PaleoScene
Kettle or mammoth tooth? By David Rudkin and Kevin Seymour

43 Conservation Notes
Identifying the culprit behind the shrinking, cracking, and swelling of wood.
By Douglas Converse

45 ROM Answers
In 19th-century Toronto, one store was known as the place to buy ceramics.
By Ross Fox

48 From the Archives
Turning a corner in ROM's development. By Julia Matthews

12 Let them wear outfits by Rose Bertin



20 Walpole: biological treasure trove

32 A master silversmith's shining example

COVER: THESE BLACK-EYED SUSANS AT WALPOLE ISLAND ARE TYPICAL OF PRAIRIE HABITAT. PHOTO: G. ALLEN

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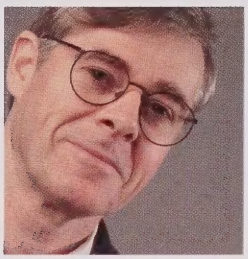

Dr. Ross Fox
Department of Western Art and Culture

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KIMBERLY ("Designing Woman") is a Ph.D. candidate at the University of Aberdeen, Scotland, and a graduate of the Courtauld Institute of Art's M.A. program in History of Dress. Her dissertation is a biography of Rose Bertin. In 2001, she was a Veronika Gervers Fellow at the ROM.

COMING NEXT ISSUE

Images of Iroquoian Women
ROM anthropologist Mima Kapches makes a rare discovery

DIRECTOR'S MESSAGE

DEVELOPMENT OF NEW permanent galleries for the Museum goes to the heart of the Renaissance ROM project and poses a significant intellectual challenge: What makes for a great museum gallery in the current age? Now that we have the splendid canvas of Daniel Libeskind's new "crystal" building, with seven new galleries perched over Bloor Street, and the revival of our great exhibition halls in the original buildings, how should we use them?

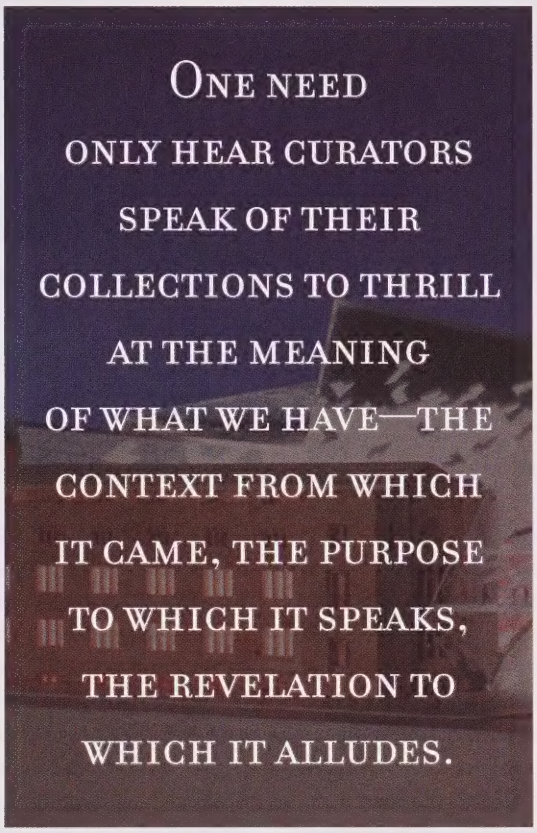
At the ROM, we start with the collections, which are among the finest in the world in many areas, and very good in many more. Supported by research and acquisitions, it is the collections that define the ROM as a museum of first rank internationally, and so it is the collections that must take pride of place in permanent galleries.

It's pretty obvious really: Great galleries consist of great stuff. This applies to art galleries as much as it does to specialized museums of technology, culture, or natural history. Exhibit wonderful artifacts and artworks in ample quantity and you can get a lot of other things wrong and still provide substantial value and pleasure to an interested public. So the first principle for our new galleries is this: We will ensure that the best of our collections are fully available to the public in permanent galleries (enhanced by our digitization project, which will allow visual access to all collections in our new Learning Centre).

But that is not enough. One need only hear curators speak of their collections to thrill at the meaning of what we have—the context from which it came, the purpose to which it speaks, the revelation to which it alludes.

The beautiful coats that the Innu made to hunt caribou in the 19th century are filled with symbolic intent, expressed in their conception and design. And you can see the growing influence of European culture on their form as the decades passed. The coats alone cannot tell you this.

The remarkable fossils from the Burgess Shale in British Columbia are evidence of the first explosion of multicellular life on Earth—the "Big Bang" of life—in addition to being wonderfully strange and often lovely. But they do not describe that miracle on their own. They require interpretation and contextualization for the visitor.



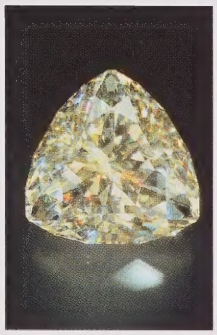
We must offer context in our permanent galleries—which is our second principle of development. But how? Is it true that adult visitors simply will not read text in a modern museum? Are acoustical guides an effective alternative? Is it true that younger people must have "interactives" to sustain any interest, no matter how fabulous the collections and the stories that go with them?

How do we present information that brings collections alive, without getting in the way of the objects themselves or going beyond the tolerance or capacity of the public for data? "Museum fatigue" is also a factor affected by gallery design—the feeling that you sometimes have of mental and physical exhaustion in touring permanent galleries. Some of that comes from disorientation in dark mazes of rooms and halls that create claustrophobia. Some of it comes from sensory deprivation—the lack of sound and light—or sensory overload. And some of it comes from physical design—the nature of floors and finishes, and the availability of seating and options. So our third principle of gallery design seeks to avoid museum fatigue caused by the design itself.

All these principles and puzzles will guide our curators and design consultants over the coming months. Haley Sharpe Design, from the United Kingdom, are working with ROM staff and volunteers to resolve these issues, whether in our new galleries of costume and textiles, world aboriginal peoples, dinosaurs, international arts, Canadian heritage, Canadian first nations, biodiversity, mineralogy, paleontology, China, South Asia, or Japan.

This is the most challenging of all the intellectual tasks that come in the package known as Renaissance ROM, housed in great architecture, old and new, opening in 2005 at the heart of Canada's largest metropolis.

EXPLORA



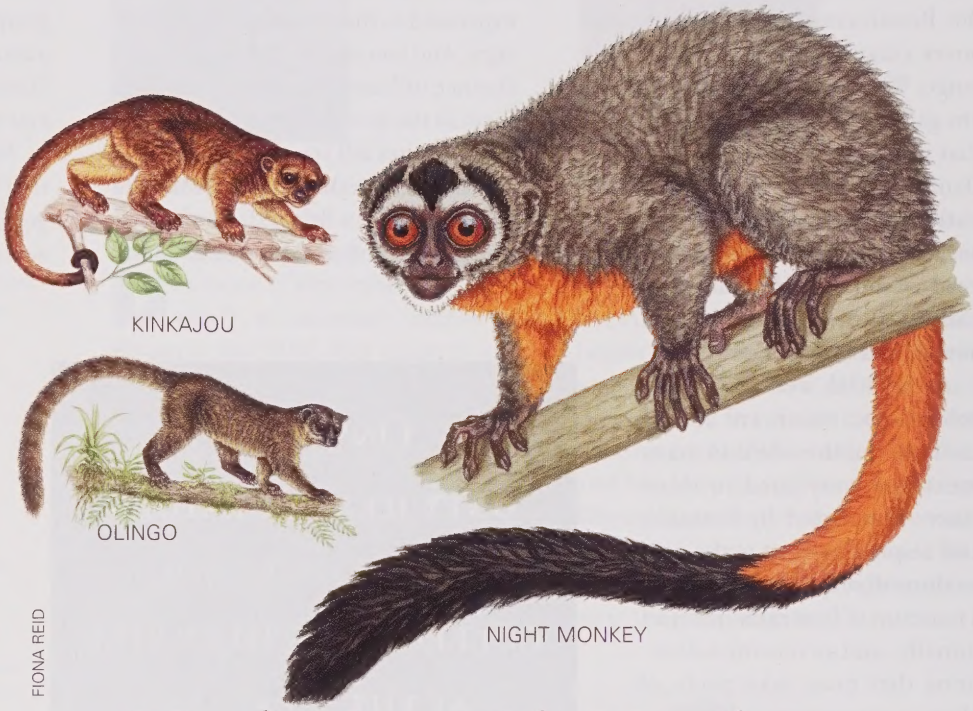
M47982 / ©TERRA: PHOTO BY JEFF SCOVIL

Light of the Desert

The World's Biggest Cerussite Gem

It's hard to imagine any natural gem with more fire and brilliance than a diamond. But such material exists: cerussite, a lead carbonate mineral. Unlike diamond, though, it is soft and highly sensitive to heat and vibration. No one has been able to cut a gem from cerussite larger than 200 carats—until now. The exceptional 900-carat gem pictured above, recently acquired through the Louise Hawley Stone Charitable Trust, was cut by Maria Atkinson of Sedona, Arizona. She named it "Light of the Desert" for the desert of Namibia where the rough crystal was mined. It is dazzling to look at. Bring your sunglasses.

—Terri Ottaway



FIONA REID

Monkeying with Monikers

How Common Names Can Stump Biologists

I am often asked why biologists use scientific Latin names—which are inevitably long, hard to pronounce, or seemingly meaningless—instead of common names, such as *Procyon lotor* for the common raccoon. Even in the age of globalization, my explanation about the practicalities of a universal name is sometimes not convincing enough to sway the inquisitor. But an example from my fieldwork and research on the mammals of Guyana, conducted with Dr. Mark Engstrom, ROM senior curator of mammalogy, may help to explain.

Since our first trip in 1990, Mark and I were told by locals and scientists alike that the night monkey (*Aotus trivirgatus*) was found in Guyana. There was, however, no hard evidence such as a museum specimen to support these sincere claims. During one of many memorable nights of fieldwork at Iwokrama Forest (see *Rotunda*, Winter 2000), our Amerindian guides woke us at 4 am after a late-evening foray on the Burro-Burro River. They had brought back three "night monkeys," all found feeding in a large tree by the river.

Only then did we realize that the guides had been using the common name "night monkey" to refer to the kinkajou (*Potos flavus*), a mammal closely allied to the raccoon. But even this wasn't the end of the story. One of the three animals was not a kinkajou, but another raccoon-like mammal, the olingo (*Bassaricyon beddardi*). Our guides recognized it as a different animal but still referred to it by the same common name. To further complicate matters, in neighbouring Venezuela, Brazil, Suriname, and French Guiana, there are corresponding common names in Spanish, Portuguese, Dutch, and French, respectively—not to mention the host of local indigenous names. That's why I prefer to use the one weird name that all biologists use to identify individual species.

—Burton Lim

TIONS

D. RUDKIN, ROM

Face Value

Towing the lineage of the ancient seas

TRILOBITES, a group of long-extinct arthropods—the distant cousins to modern crustaceans, insects, and spiders—have left a remarkable fossil record. Living exclusively in marine waters, most trilobites as adults were active swimmers and crawlers at or near the sea floor. The interlocking components of their mineralized outer body covering, or exoskeleton, came in a bewildering array of shapes and sizes, reflecting almost 300 million years of evolutionary variations on a theme. Their remains can be quite common in marine sedimentary rocks of Palaeozoic age (540 million to 250 million years ago). The curious, mask-like object illustrated here is the head shield, or cephalon, of a tiny trilobite of Silurian age (about 430 million years old) called *Scotoharpes*. Measuring only 8 millimetres (⅓ of an inch) across the flattened horseshoe-shaped fringe, the head possesses a pair of small bumps, one on either side of the central nose-like structure. Although the "nose" actually housed the trilobite's main digestive organ, the two little bumps really are eyes. The rest of the exoskeleton became separated from the head, probably when the animal shed its covering to grow larger. This specimen is part of an important new research collection gathered by the ROM's Dave Rudkin and Peter Fenton from a Silurian tropical reef now exposed on Akimiski Island in James Bay, southern Nunavut. The ROM was recently designated as an official interim repository for these fossils; the collection will eventually be returned to the Government of Nunavut.

—David Rudkin

928.59.2 / BRIAN BOYLE, ROM

A Celtic Cult

The tale of the severed heads

HANGING FROM pearled cords around the head on this gold stater is a series of small severed heads. The coin was struck in the later 2nd to the early 1st century BC by the Veneti, a tribe living in present-day Brittany, France. A common belief among the "Keltoi"—the name given by the Greeks and Romans to all tribes living beyond their borders, from Britain to beyond Hungary—was that heads severed from defeated foes held strong magical powers. More than mere battle trophies, these heads, they felt, could avert evil and bring good luck. Skulls were suspended from the gateways and ramparts of Celtic forts and in religious sanctuaries. Roman writer Diodorus Siculus recorded in the 1st century BC that Celts embalmed the heads of distinguished enemies in cedar oil and displayed them with pride. Human skulls were also decorated with gold mounts and used as drinking cups. The main head on this coin itself has a supporting pole running up through the neck; it, too, is likely a cultic severed head—its powers would be increased by the surrounding miniature heads with their own potencies.

—Alison Easson

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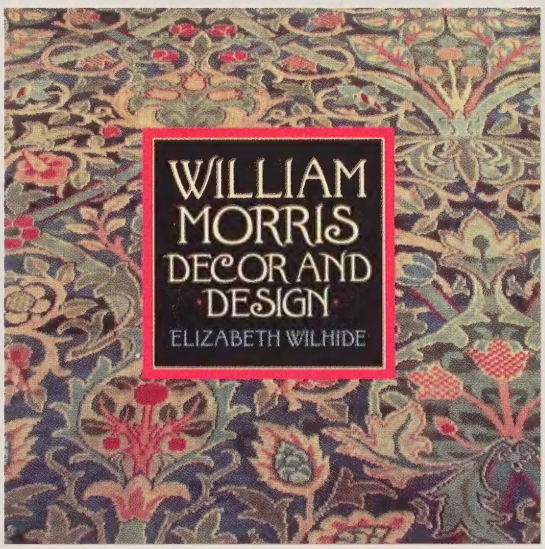
Decor, Design, Desire

FEATURE REVIEW

William Morris: Decor and Design

By Elizabeth Wilhide (Abrams, Cloth: $65)

Obsessive love can find expression in many ways. Pre-Raphaelite artist Dante Gabriel Rossetti painted Jane Burden, wife of Arts and Crafts Movement founder, William Morris, more than 50 times. Female pulchritude was a favourite subject of the Pre-Raphaelite Brotherhood, and as a result the brethren created their own poster girls. Jane had first caught Rossetti's eye when he and Morris were together at the theatre. Although engaged, Rossetti was determined to have the 17-year-old "stunner" in his circle and persuaded Morris to approach her. After an awkward courtship, the loquacious Morris and the taciturn Jane married. Burdened for life with an unhappy marriage, Morris always took the high road, on one occasion all the way to Iceland, for two years, while Rossetti and the painted lady indulged their passion. The stress, however, may have manifested itself in other ways. Friends observed Morris's "disconcerting habit of winding his legs so tightly around chair legs as he sat that the frame would sometimes snap." His firm's business manager implored him to reduce his intake of wine to two and a half bottles a day. His political rhetoric was described as "often no more than a kind of generalized swearing."



The beauty of the swan-necked, sloe-eyed Jane may not translate perfectly into the 21st century. She does look like a gloomy sort, with an eccentric appetite for pomegranates. For my money, the enthralling Muriel Foster (Waterhouse's *La Belle Dame Sans Merci*) and the auburn-tressed Mary Waterhouse (*The Lady of Shalott*) have navigated the river of time more successfully (even though, unlike the Keatsian heroine, the latter "hath no loyal knight and true"). So has Rossetti's real wife, model/artist Lizzie Siddal, who posed fully clothed in a tub of cold water, while Millais immortalized her as Ophelia, and nearly caught her death by cold. She eventually caught her death by laudanum.

In his verse also, Morris obsessed over ideal women, such as the mythical Psyche, a glamour girl whose elevation to goddess confirmed the brotherhood's notion that beauty, like love, conquers all.

The soap opera of Morris's life continued into new seasons through his offspring. The playwright Shaw claimed a "mystic betrothal" to Morris's daughter May and decided to move in with her (and her husband). Perhaps not surprisingly, the young woman's marriage disintegrated. Just weeks before her divorce, Shaw married another woman.

Despite the chaos of his domestic life, or perhaps because of it, Morris created through his art a perfect, ordered world. From illuminated manuscripts and stained glass to wallpapers, fabrics, and furniture—his translations of myth, legend, and the English countryside into art and decor—his aesthetic vision—endures. Wilhide's magnificent work is a tour of spaces either designed by Morris—including the interiors of his Red House, Kelmscott House, and Kelmscott Manor—or which incorporate Morris patterns. The reader is always aware that Morris has brought nature, imbued with new magic, inside. (Revealingly, one of his vivid childhood memories was that of a room hung with greenery, in a manor house in Epping Forest).

In the ROM, artifacts in the English Arts and Crafts style are exhibited in the Samuel European Galleries.

COMPILED AND REVIEWED BY GLEN ELLIS

The Restaurants of the ROM

Jamie KENNEDY at the Museum

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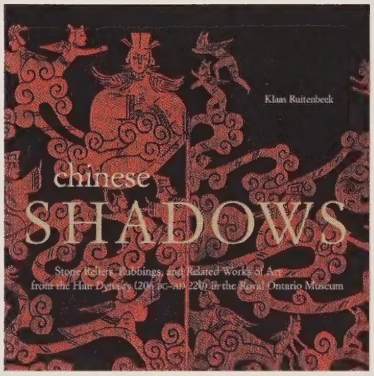


Chinese Shadows: Stone Reliefs, Rubbings, and Related Works of Art from the Han Dynasty (206 BC–AD 220) in the Royal Ontario Museum

Klaas Ruitenbeek (Royal Ontario Museum, Paper: $24.95)

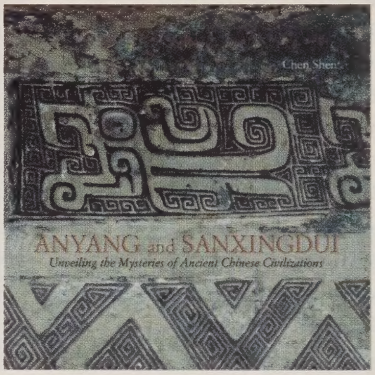
ONE OF THE GREAT STRENGTHS of the ROM is its responsible approach to preserving and perpetuating its exhibitions through corresponding publications.

The recent ROM exhibition *Chinese Shadows: Rubbings of Han Dynasty Stone Reliefs* (July 6 to December 2, 2002) finds a permanent record in this exhibition book by senior curator Dr. Klaas Ruitenbeek, who holds the ROM's Louise Hawley Stone Chair of Far Eastern Art. Dr. Ruitenbeek writes eloquently of the nature of the rubbing as an art form: "What is the charm of a rubbing? In a new rubbing, it is the smell of the ink, the relief of the paper that answers to every engraved line or natural irregularity in the stone. In an old rubbing, it is sometimes the knowledge that the seemingly imperishable stone monument from which it was taken no longer exists, and that a shadow in black ink on thin paper is its only trace." As always, Dr. Ruitenbeek brings distinguished scholarship and an artist's sensitivity to his subject. The cover illustration is a detail from *Ascension to Heaven*, a woodblock-print reproduction of a rubbing from the Wu Liang shrines. An especially beautiful and rare related work from the exhibition is the Han dynasty *Paradise Lamp*, donated to the Museum in 2000 by Joey and Toby Tanenbaum.

Anyang and Sanxingdui: Unveiling the Mysteries of Ancient Chinese Civilizations

Chen Shen (Royal Ontario Museum, Paper: $24.95)

PUBLISHED IN CONJUNCTION with the travelling exhibition *Treasures from a Lost Civilization: Ancient Chinese Art from Sichuan*, hosted by



the ROM August 3 to November 10, 2002, this new work by the Bishop White Curator of Far Eastern Art, Dr. Chen Shen, illuminates the ROM artifacts added to the exhibition and presents the newest research and discoveries at Anyang and Sanxingdui. It also puts the artifacts in their historical and cultural context. Erudite and meticulous, Dr. Shen conveys as well the *romance* of archaeology, the human dimension of a vanished world, as though the peoples' voices might still be heard, riding on the wind, through the tall grass where once their city stood.

High Hopes for the Tallgrass Prairie

Where once they spread across much of North America, today these habitats are among Ontario's least known and most endangered.

MARY BURRIDGE AND DEBORAH METSGER

The now rare oak savanna habitat in Toronto's High Park was captured in this historical painting *Spring Breezes, High Park* by J. E. H. Macdonald.

COURTESY NATIONAL GALLERY OF CANADA

For most people, the term prairie conjures up images of the Midwest—vast expanses of flat lands and wheat fields, or open grasslands with bison roaming freely. But prior to European settlement, grasslands covered 90 million hectares (222.3 million acres) of central North America, extending from the Rocky Mountains to Ontario and Ohio, and from Oklahoma and Texas up through Alberta, Saskatchewan, and Manitoba.

These grasslands formed in areas with well-drained soils where there was not enough moisture to sustain a forest, but where deep-rooted grasses and herbs could survive. For centuries Native peoples used fire to keep the grasslands open for hunting, gathering plants, and travel. Fires burned off the litter layer and killed any woody plants that had seeded in, halting the process of succession to forest.

Not all of the North American prairies were vast. In Wisconsin, Michigan, and Ontario, where the grasslands reached their northern and eastern limits, prairies and savannas occurred as a patchwork growing among the deciduous forest. Open prairies dominated by wildflowers and tallgrasses up to 3 metres high graded into savannas with scattered trees growing in open spaces, and then to woodlands with 25 to 35 percent tree cover. Southern Ontario was dotted with this mosaic of grassland.

The 19th-century Canadian naturalist Catherine Parr Traill encountered prairie habitats when she moved to the Peterborough Plains. In 1836 she wrote: "These plains form a beautiful natural park . . . enameled with a variety of the most exquisite flowers, and planted, as if by Nature's own hand." Today, tallgrass prairies and savannas are Ontario's least known and most endangered habitat.

Endangered Spaces

The beauty and openness of the prairies made them attractive not only to naturalists but to farmers as well. It was far easier to plow a prairie than to fell and de-stump a forest. So, prairies were converted to farmers' fields, with farmhouses often built in the adjacent savanna under the protection of the trees. As towns and cities were built, the grasslands across North America succumbed to development. By 1936, ecologist Aldo Leopold wrote of the tallgrass prairie in his book

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A Sand County Almanac: "No living man will see again the long-grass prairie, where a sea of prairie flowers lapped at the stirrups of the pioneer." With less than 1 percent remaining, the prairies have become one of the most endangered habitats on the planet.

Endangered Species

As Ontario's tallgrass habitats became endangered, so too did the wealth of plants and animals that inhabited them. Elk that formerly roamed many North American grasslands, including those of southwestern Ontario, have vanished; now they inhabit only remote mountainous regions. The Greater Prairie Chicken requires undisturbed tallgrass prairie, and so has been extirpated from Ontario, now occurring only in Manitoba and south of the border. At the smaller end of the spectrum, the tiny Karner Blue Butterfly with a wingspan of only

Celebrating Ontario's Tallgrass Prairie

On a usual day, the Hands-on Biodiversity Gallery is one of the most bustling spaces in the Museum. But on the afternoon of April 5, 2002, the combined launch of National Wildlife Week and the opening of the gallery's new Tallgrass Prairie Alcove drew more than 200 people to listen to speeches and view special exhibits by many of Ontario's conservation organizations. Sixty-eight school children and their chaperones from the Walpole Island First Nation travelled to Toronto to be part of the ceremonies (see "Where the Waters Divide," page 20).

In preparation for attending the ROM opening, the grade 4 and 5 students at Walpole Island Elementary School learned about the prairies that exist on their territory and the many plants and animals that dwell there. Students were asked to create posters about the tallgrass prairie and its importance to the First Nation. Staff of the Walpole Island Heritage Centre judged the posters. The winner, Grade 5 student Julia Miskokomon, was selected to cut the ribbon to open the new tallgrass exhibit. The ribbon was held by ROM director William Thorsell and Toby Barrett, MP for Haldimand-Norfolk-Brant. Julia's poster is on display in the gallery.

2.5 cm (less than an inch) is now extirpated from the prairies of Ontario because of the scarcity of wild lupine, which the butterfly's larvae feeds on. Other species that still have a toe-hold but are considered to be rare or endangered include the American badger, pink milkwort, eastern Massasauga rattlesnake, small white lady's slipper, and northern bobwhite.

Southwestern Ontario has more rare and threatened species of both plants and animals than any other part of Canada. These species are at risk either because they are at the northern limit of their range or because their prairie habitats have been degraded, reduced in size, or lost to farming, land development, and/or succession to forest due to the suppression of wild fires. Without fires, shrubs and trees invade the prairies' open spaces, shading out grasses and wildflowers that are typical of a tallgrass prairie habitat.

Top: Current distribution of tallgrass prairie remnants in Ontario and four sites that have been preserved and restored. Red dots represent tallgrass prairie remnants, yellow dots represent exemplary tallgrass prairie sites featured in the gallery. The dark shaded areas are deciduous forest. **Bottom:** This tallgrass prairie on Walpole Island seen in mid-summer is dominated by the threatened prairie flower, dense blazing star.

MAP: ERIC SIEGRIST / PHOTOGRAPH: G. ALLEN

Preservation and Restoration

THERE IS A MEASURE of hope in this doom-and-gloom account of Ontario's tallgrass prairie. The province now has a formal Recovery Plan with the goal of preserving the few remaining tracts of tallgrass habitat and, where possible, restoring those that have been lost or degraded. The Recovery Plan challenges everyone involved to protect tallgrass sites, manage important natural processes such as fire, educate the public, and co-ordinate restoration efforts.

The tallgrass prairie lands of Walpole Island First Nation in southwestern Ontario south of Sarnia are the finest remaining tallgrass sites left in the province because they have been carefully used and regularly burned by Aboriginal people for centuries. On Walpole Island today, education programs for youth are presented to ensure that tallgrass prairie will be preserved in the territory for generations to come. Elsewhere, tallgrass sites that are being preserved, restored, and maintained include Ojibway Prairie, Pinery Provincial Park, City of Brantford Greenway, Turkey Point Provincial Park, High Park, and Rainbow Prairie.

Ojibway Prairie is owned by the city of Windsor and the Ontario Ministry of Natural Resources. Located within the city limits, the preservation and maintenance of this network of native habitat sustains many rare and endangered species. High Park, in the city of Toronto, has one of Ontario's largest remaining stands of oak savanna; recreational use over the years almost destroyed the savanna, but by ceasing to mow the grass, removing invasive species, carrying out controlled burns, and planting native species, this important site is now being restored. In Rainbow Prairie near Peterborough, community efforts are recreating a prairie from farmland in a region where it once thrived.

The most notable interest group supporting Ontario's tallgrass habitats is Tallgrass Ontario. The organization's mission is to identify, conserve, manage, and restore tallgrass prairie, savanna, and related ecological communities in Ontario. Its members are also involved in educating the public (www.tallgrassontario.org).

Take Action and See for Yourself

ANYONE CAN BECOME involved in the preservation of Ontario's remaining tallgrass habitats. A good place to start is the ROM's new Tallgrass Prairie Alcove in the Hands-on Biodiversity Gallery. A visit to this gallery will increase your knowledge of our natural heritage and will inspire you to visit these endangered habitats for yourself. The best time to see Ontario's tallgrass prairies and savannas is in late summer when the warm-season grasses and wildflowers are at their peak. But remember, take only pictures, leave only footprints.

Having seen the prairie, you may want to help restore this endangered ecosystem—either by planting a prairie garden in your own backyard or by joining one of the many restoration or reclamation efforts taking place throughout southern Ontario. Contact your local parks department, MNR office, or Tallgrass Ontario to find a project near you. Relevant organizations are listed in the ROM's Tallgrass Prairie Alcove.

Mary Burridge and Deborah Metsger are assistant curators in the ROM's Centre for Biodiversity and Conservation Biology.

CLICHÉ BIBLIOTHÈQUE NATIONALE DE FRANCE, PARIS

Marie-Jeanne "Rose" Bertin

Designing Woman

Haute couture designer—and social climber nonpareil—Marie-Jeanne Bertin attracted an elite 18th-century clientele that included the queens of France, Spain, and Sweden.

By Kimberly Chrisman-Campbell

In the heady, fashion-crazed days of late 18th-century France, Marie-Jeanne "Rose" Bertin was a celebrity, breaking new ground as fashion consultant to Marie-Antoinette and many other illustrious ladies—and gentlemen—of the court of Louis XVI. Remarkably, an exquisite gown and matching underskirt attributed to Bertin is one of the treasures in the ROM's textiles collection. It is a rare surviving example of pre-Revolutionary court dress, and if it is indeed by Bertin, it is rarer still, for only a few pieces attributable to that famous and prolific dressmaker survive (see "Dressy Origins," page 17).

Technically, Rose Bertin was not a dressmaker but a milliner, or *marchande de modes*, which translates literally as "fashion merchant." For most of the 18th century, fashion sense was demonstrated by the choice of trimmings and accessories. By supplying these, the *marchandes de modes* dictated the course of 18th-century fashion. France's complex system of guilds restricted *marchandes de modes* from making gowns and from trimming them with the same fabric with which they were made; this was the exclusive right of *couturières*, or seamstresses. But in 1776, the *marchandes de modes* of Paris were formally incorporated (Rose Bertin was chosen as mistress of the new corporation). With this reorganization, *marchandes de modes*—already sought after for their ribbons, laces, cloaks, caps, and headdresses—could now claim dominion over a woman's entire wardrobe.

Although Rose Bertin's name may be unfamiliar today, in her lifetime she was internationally renowned. By 1787, hers was "a name known . . . in all the countries of the world," according to a well-travelled witness, the Marquis de Bombelles. It is a tribute to Bertin's immense fame that we actually have a portrait of her. Today we take it for granted that fashion designers can become celebrities, but for that time it was a rare achievement for a mere milliner. More noteworthy still, Bertin remained at the top of her profession for nearly 20 years; few fashion designers in history have enjoyed such prolonged success.

Bertin's association with the French queen, Marie-Antoinette, no doubt played a large part in Bertin's rise to fame—and in her downfall. But Bertin's rags-to-riches story owes just as much to talent and ambition. France's *ancien régime* offered few avenues for social mobility, particularly for unmarried women. Through ingenuity and sheer force of personality Bertin overcame this obstacle—and in the process elevated fashion from trade to art.

Born in 1747 in Abbeville, a textile town north of Amiens in Picardy, France, Bertin came from undistinguished origins. When she was only seven years old, her father died, leaving the family in a rather precarious financial state. While still in her teens, she set off for Paris to apprentice with Madame Pagelle, an established milliner with ties to the French and Spanish courts.

Seven years later, in 1770, Bertin left Madame Pagelle's to open her own shop. The unknown provincial girl quickly eclipsed her more famous rivals and attracted an elite clientele. Two royal weddings that took place just as she was beginning her career undoubtedly helped, as they created a great demand for court dress. News of Bertin's genius spread quickly; the Princesse de Conti recommended her to the Duchesse de Chartres, who in turn praised her talents to the

NATIONAL GALLERY OF ART, WASHINGTON

Marie-Antoinette
wears her scandalous new style.
Portrait by Elisabeth Vigée-Lebrun, 1783

newly crowned Queen Marie-Antoinette in 1774.

Bertin was not Marie-Antoinette's only *marchande de modes*; the task of dressing the queen was far too demanding for just one person. But no other *marchande de modes* was allowed such free and frequent access to the queen—or to the royal treasury. Rose Bertin and Marie-Antoinette became inextricably linked in the public imagination, and it was Bertin who took the credit (and the blame) for the French queen's decadent elegance.

Marie-Antoinette is remembered as a woman obsessed with fashion. Before meeting Rose Bertin, however, she was not considered especially well-dressed. The Duchess of Northumberland, who attended the queen's wedding, gave an unflattering account of the 14-year-old bride, awkwardly attired in a formal court gown. Afterwards, Madame Campan, the queen's lady in waiting, observed Marie-Antoinette's growing interest in fashion with alarm, writing: "The Queen had shewn but a very plain taste in dress; she now began to make it an occupation of the moment; and she was of course imitated by other women. Every one instantly wished to have the same dress as the Queen, and to wear the feathers and flowers to which her beauty, then in its brilliancy, lent an indescribable charm. The expenditure of young women was necessarily much increased; mothers and husbands murmured at it; some giddy women contracted debts; unpleasant domestic scenes occurred; in many families quarrels arose; in another, affection was extinguished; and the general report was—that the Queen would be the ruin of all the French ladies."

Infanta
Dona Carlota Joaquina.
Portrait by M. S. Maella

For Bertin, however, the queen was her best advertisement. By 1778, Bertin had grown so powerful at court that the press dubbed her France's "ministre de modes" or minister of fashion. Bertin's genius was what we now call planned obsolescence; she brought fashion up to the very minute. By creating topical fashions named for current events, Bertin ensured that they would go out of style as quickly as they had come in. The pouf headdress was symbolic of fashion's new pace, alluding to political scandals, popular plays, scientific advances, or public figures. The price of feathers skyrocketed as headdresses rose to such heights that, according to one observer, "women could not find carriages high enough to admit them; and they were often seen either stooping, or holding their heads out at the windows."

The queen was certainly Bertin's most famous patron, but nearly 400 other Rose Bertin clients have been identified from clothing bills that survive in French archives. She had an enormous, diverse, and international clientele; her business records read like a Who's Who of 18th-century society. In addition to the Queen of France, Bertin dressed Queen Sophia Magdalena of Sweden, Infanta Carlota Joaquina of Spain (who later became Queen of Portugal), Queen Louisa of Spain, Grand Duchess Maria Feodorovna of Russia, and half the nobility of Europe. Bertin even provided the 10-year-old Spanish infanta with the French trousseau for her marriage to the prince of Portugal (the dress seen at left was likely a part of the trousseau). Many men, too, bought gifts for their wives or lady friends from Bertin, including Thomas Jefferson, while he was American ambassador to France.

As Marie-Antoinette came under increasing criticism for her excesses, she tried to simplify her wardrobe, trading brocaded silks for muslin, and feathered poufs for straw hats. But because of the quality of the imported fabrics used, her new pastoral style was just as influential, expensive, and damaging as the old one had been. Elisabeth Vigée-Lebrun's portrait of the queen in a plain white muslin gown and straw hat created a scandal at the salon of 1783—the gown was thought to resemble a chemise or undergarment. Nevertheless, variations on the so-called *chemise à la reine* soon appeared in all the fashion magazines, including the plate pictured on the next

©MUSEO NACIONALE DEL PRADO, MADRID

page from the *Gallerie des Modes* in the ROM collection.

In spite of her gestures toward economy and simplicity, the queen continued to be perceived as the ruin of all French ladies. And as her popularity waned, so did that of her favourite "ministre." Bertin drew criticism not only for her astronomical fees, but also for her privileged place in the royal circle. It would be impossible to exaggerate the degree to which Bertin made herself at home at Versailles, or the outrage this provoked. Bertin could often be found roaming the corridors of Versailles and was invited to performances at the court theatre. The Vicomtesse de Fars complained: "The best place in the court theatre was reserved for a shopgirl, whom the Duc de Duras escorted by the hand." The queen even abandoned royal protocol so that Bertin could be present in her apartments as she dressed each morning.

Not surprisingly, Bertin developed an ego of royal dimensions. The Baronesse d'Oberkirch called her "a singular person, inflated by her importance, treating princesses as equals." A rival *marchande de modes* complained that Bertin "assumed the airs of a Duchess, and was not even middle class." She was notorious for refusing to serve provincial and bourgeois ladies. A newspaper described her stretched out in her shop on a chaise longue, greeting her noble patrons with a "very slight" inclination of her head.

To the aristocracy, Bertin was an upstart and an interloper; to the *sans-culottes* (lower-class Parisian republicans), however, she was no better than an aristocrat herself. Royalists and republicans alike held Bertin responsible for encouraging Marie-Antoinette's extravagance; nevertheless, she continued to dress the queen right up until Marie-Antoinette's imprisonment in the Temple in August 1792.

Ironically, Bertin's heroic triumph over her humble origins was symptomatic of sweeping social changes that would catapult France into revolution, which had catastrophic consequences for the French fashion industry. The luxurious trimmings that had been the bread and butter of the *marchandes de modes* became politically incorrect. Unlike the queen and many of her other clients, however, Bertin managed to survive the Revolution by leaving the country, travelling to London, Brussels, Frankfurt, and possibly St. Petersburg, where she continued to dress fashionable foreigners and French émigrés. Although she was twice accused of emigrating, a crime punishable by death, both times she managed to prove that she had left France on legitimate business.

By the time she returned to Paris in 1795, Bertin was out of danger, but also out of style. In 1799, she could still count the queens of Spain and Sweden and the Duchess of Devonshire among her customers, but very few French women. Soon after, she retired to her country house at Épinay. Although many of her clients died or fled the country and never paid their bills, and she never regained her pre-Revolution fortune, Bertin managed a comfortable retirement. It would be an exaggeration to say she lived happily ever after. Perhaps it was enough, in those dangerous times, that she lived at all. She died on September 22, 1813, a year before the restoration of the monarchy in all its splendour; upon his return to Paris in 1814, Louis XVIII, who had known Bertin before the Revolution, apparently asked for the former "minister of fashion," and hearing that she had been dead for six months, publicly expressed his regret.

Undoubtedly, if she had lived, Rose Bertin could have made a comeback, just as Coco Chanel did after finding herself on the wrong side of the political climate during World War II. French society had changed forever, but change is the essence of fashion, and Bertin had always thrived on it. Her remarkably long reign at the top testifies to a talent for reinvention and self-promotion. Fashions came and went, but Rose Bertin was almost always in style.

The simple pastoral look
seen in this fashion plate from the Gallerie des Modes *was popularized by Marie-Antoinette*

961.91.2 / BRIAN BOYLE, ROM

Dressy Origins

Was the ROM's Gown Made by Rose Bertin?

Only a few specimens attributable to famed 18th-century French dressmaker Rose Bertin survive. One of them is a gown and matching underskirt in the ROM's textile collection. While many of the pieces attributed to Bertin are damaged or incomplete, the ROM's gown, though stained and altered, is remarkably intact. The Museum's first director, C. T. Currelly, purchased it in 1925 from Mary Christie, a London antiques dealer who in the 1920s supplied the ROM with several 18th-century gowns. Christie was the source of the Rose Bertin connection. But was she a trustworthy source?

Ultimately, it is impossible to prove that the ROM's or any other 18th-century garment was created by Rose Bertin, or worn by Marie-Antoinette. But, at the same time, there is no reason to doubt it. The motifs and techniques used in this gown link it to other surviving garments almost certainly made by Bertin, and the ROM's accession records and Marie-Antoinette's bills (which mention a similar gown) further support the provenance. If it was not made by Rose Bertin for Marie-Antoinette, the gown was undoubtedly made by an extremely skilled French *marchande de mode* or "fashion merchant" of the same period for a high-ranking lady of the court. The embroidery, materials, and original stitching are of the very highest quality; the entire garment—from fabric to sequins—was made by hand, in an age before mechanization.

The gown—particularly the bodice—was altered (the new stitching is obvious and the embroidery doesn't match up on one of the seams) during the 19th century, but many original features survive. An open robe *en fourreau,* meaning that the gown has a fitted bodice cut in one piece with the trained overskirt, the gown has back pleats on the bodice stitched down to the waist, and a matching petticoat is visible underneath. The cut dates it to the 1780s. If not for the alterations, it might be possible to date it much more precisely.

1780s French court gown
from the ROM's collection
may have been made by Rose Bertin

The long train suggests a ceremonial or court context; length varied according to the occasion and the wearer's social status. Almost every inch of the train is embroidered. The gown's ivory silk satin—a popular choice for showing off embroidery—probably originated in the French silk-weaving capital of Lyon; from selvage to selvage, the centre panel of the train measures 54 centimetres, the standard width of Lyon looms. The fabric itself would have been fairly inexpensive, but the costly embroidery would have put the gown out of reach for all but the very highest society.

Historically, the wearing of embroidery in France was controlled by sumptuary laws, a measure of its high cost. In 1315, embroidery was reserved for royal princes, and its use continued to be regulated as late as the reign of Louis XIV. Over the course of the 18th century, however, it was increasingly worn by both men and women who could afford such a luxury.

The embroidery motifs on the ROM gown, particularly the peacock feathers, strongly suggest a royal con-

925.18.31 / BRIAN BOYLE, ROM

PHOTOGRAPH ON RIGHT, COURTESY LYON TEXTILES MUSEUM, TOP AND BOTTOM LEFT, BRIAN BOYLE, ROM

Royal details: the peacock and pheasant feathers

on the ROM's gown (bottom left) have royal connotations and are similar to those shown on a wall-hanging (right) commissioned for Marie-Antoinette's chamber at Versailles. Swags of ribbon and realistic flowers on the ROM's gown (top left) were popular embroidery motifs in the 18th century

nection. Native to southern Asia, the peacock was imported to the West in the 5th century BC. In India, it was an emblem of princes, but in the West the bird's beauty was perceived as specifically feminine. With its tiny crown of feathers, its magnificent train of tail feathers, and its proud and graceful carriage, the peacock was thought to resemble a queen, and has long since been associated with queens and empresses. In Ancient Greek mythology, the peacock was the symbol of Hera, the wife of Zeus, and in Roman funeral rites, the peacock was thought to transport the spirit of the empress to the heavens, just as the eagle carried the spirit of the emperor.

Centuries later, in 1771, Catherine the Great of Russia commissioned wall hangings adorned with strutting peacocks and pheasants to decorate her palace at Tsarskoe-Selo. In 1786, Marie-Antoinette ordered a more delicate variation on the theme for her bedroom at Versailles: peacock feathers intermingled with garlands of flowers and ribbons. To this day, peacocks roam the Queen's Garden at the Château de Fontainebleau, just under the windows of Marie-Antoinette's former suite.

The pheasant iconography is a bit more difficult to link to royalty, although it, too, was an Eastern import and an ancient symbol of imperial authority. By Marie-Antoinette's time, pheasant was also a common game bird and the favourite quarry of Louis XVI, an enthusiastic huntsman. In the 1780s, the pheasant was a fashionable motif, appearing both in embroidery and in printed and woven textiles.

What is perhaps most significant about the pheasant feathers is that they are from a bird not native to France or even to Europe. The 18th century was an age of exploration, both geographic and scientific, and the greatest advances captured the popular imagination, spilling over into fashion, where they were celebrated in elaborate headdresses and illustrated in embroidery. Embroidered feathers of exotic birds or plants, then, were intellectual status symbols as well as fashion statements. We also know that on February 2, 1791, Rose Bertin sold Marie-Antoinette a *grand habit* or court gown, which she'd had embroidered with, among other things, "pink and white satin ribbon with feathers of exotic birds embroidered on the ribbon . . . the train in white satin trimmed around with . . . a satin ribbon embroidered in the same feathers bordered on each side." Bertin noted: "The feathers were furnished by and belong to the Queen." While the description does not match the ROM gown exactly, it certainly echoes it.

The flowers embroidered on the ROM's gown, unlike the exotic feathers, are fairly familiar, even pedestrian. With the growing emphasis on naturalism in 18th- century art, promoted by the writings of Rousseau and the botanical drawings of Redouté, who was appointed royal flower painter in 1788, everyone wanted clothing decorated with natural motifs, realistic flowers in particular. Many of the most popular flowers of the time are represented on the ROM's gown: poppies, peonies, carnations, daisies, pansies, hyacinths, and roses, all of which are mentioned throughout Rose Bertin's surviving bills. But many other 18th-century favourites are missing, including tulips, lilacs, and daffodils. With further research, it may be possible to date the gown more precisely based on the flowers used, or to identify possible sources for the flowers in botanical sketches of the time.

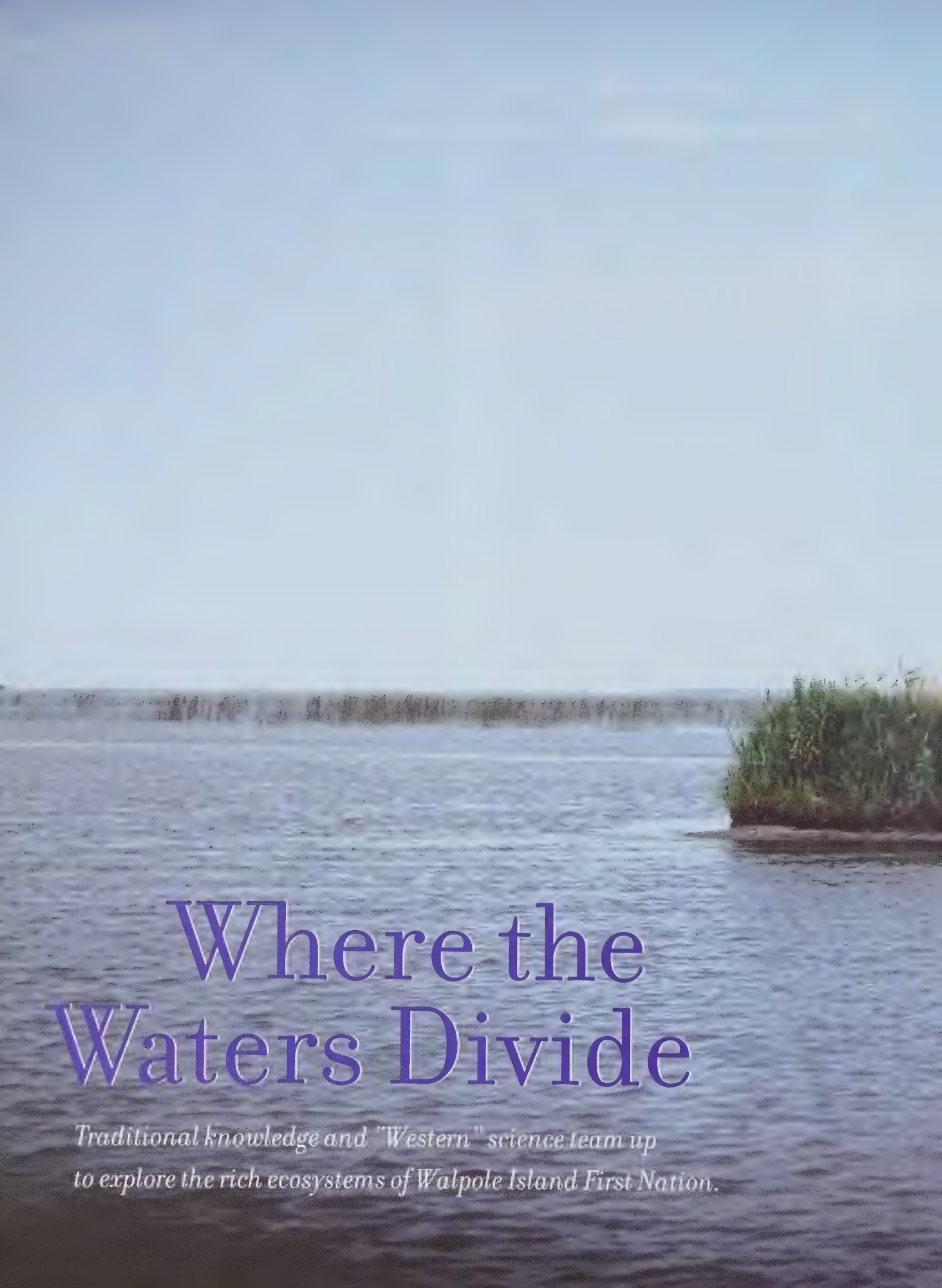
The serpentine garlands or festoons of ribbon with elaborate bows on the ROM's gown represent another popular embroidery motif of the day; the same motif appears on a petticoat panel attributed to Rose Bertin and on another heavily embellished ivory satin court gown of 1784, both in the collection of the Musée de la Mode et du Textile de la Ville de Paris. The ribbon garlands on the ROM gown are made of appliqué pale blue and pink satin on the one side and ivory satin on the other side, ingeniously combined to resemble three-dimensional swags. Ribbon was one of the fashion staples sold by *marchandes de modes*, and it was not uncommon for this ribbon to be embroidered and lined with ribbon of another colour.

Other embellishments on the ROM gown include metallic threads, *paillettes*, *paillons* (spangles), and glass stones mounted on silver facings, designed to sparkle in candlelight. Sadly, about 95 percent of the gown's *paillettes* have fallen off, but the original stitches and paste remain to give an idea of just how dazzling it would have been when it was first worn. Additional sparkle comes from pleated metallic strips called *clinquante plissé*, and two types of *bouillon*, or silk thread wrapped in a thin coil of metal.

At court, one's primary goal was to stand out from the glittering crowd. The Baroness d'Oberkirch described a ball given by Marie-Antoinette: "One of the most beautiful sights that I have ever seen is the entrance of the royal family at a ball, when all the court was present. . . . The quantity and the brilliance of the jewels, the gold and silver embroidery, and the richness of the fabrics are magnificent. One cannot imagine it without having seen it."

The same could be said of the ROM's exquisite gown. Whether or not it once belonged to Marie-Antoinette, or was made by Rose Bertin, even in its altered and damaged state, it is a stunning piece, and its beauty and artistry offer a faint reflection of a once-glittering world. ■

The author wishes to thank Dr. Alexandra Palmer and the Textiles Department, Esther Methé, Brad Millen, Dr. Tim Dickinson, and Jenny Bull at the ROM.



Where the Waters Divide

Traditional knowledge and "Western" science team up to explore the rich ecosystems of Walpole Island First Nation.

JUST AFTER DAWN ONE morning in early April, 68 grade 4 and 5 students and their chaperones gathered in the parking lot of the Walpole Island Elementary School to board two buses bound for Toronto. Spring had officially arrived two weeks earlier but the convoy from south of Sarnia encountered heavy snow on the 401. Still, the buses pressed on, as this was no ordinary school trip. These children from Walpole Island First Nation were travelling to the Royal Ontario Museum with their chief to represent their territory as special guests at the

By Deborah Metsger, Michael Williams, and Erling Holm

opening of the new Tallgrass Prairie Alcove in the Hands-on Biodiversity Gallery.

Walpole Island is one of four sites featured in the conservation section of the prairie alcove. This feature and other displays on traditional uses of prairie plants were developed collaboratively by the Walpole Island Heritage Centre and the ROM's Centre for Biodiversity and Conservation Biology. The gallery

This satellite image centred on Walpole Island First Nation shows the St. Clair River delta and surrounding developments (white) in Ontario and Michigan. The blue channels of the delta cut through areas with terrestrial vegetation at the north end of the islands (darker blue) and wetland vegetation (lighter blue) extending south to Lake St. Clair.

project was just one segment of an ongoing partnership between the two organizations. Beginning with a one-time request by the ROM in 1996 to sample fishes in Walpole Island's waters, the partnership has grown to include a ROM seat on the Walpole Island Ecosystem Recovery Strategy Team, educational and interpretive initiatives on tallgrass habitats, and a joint investigation of the Aquatic Communities of Walpole Island. It is a partnership between "Western" science and traditional knowledge to document and preserve biodiversity for future generations.

Bkejwanong, Where the Waters Divide

Walpole Island is located in extreme southwestern Ontario, south of Sarnia and west of Wallaceburg. It is one of six islands on 22,400 hectares (55,328 acres) of the St. Clair River delta at the north end of Lake St. Clair. Collectively these islands make up the present-day community of the Walpole Island First Nation (WIFN). Called "Bkejwanong" (pronounced kedge-wa-nong), meaning "where the waters divide," the Walpole Island unceded territory is recognized internationally as a biological treasure with five major habitat types: tallgrass prairie, oak savanna, Carolinian forest, wetlands, and open-water aquatics. These diverse ecosystems support 45 species of plants and animals considered to be at risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), 12 percent of the species at risk found in Canada as a whole. The 6900 hectares (17,043 acres) of wetlands found here are among the largest and most diverse of the Great Lakes Coastal Wetlands and are used annually by thousands of migrating waterfowl and numerous species of fish.

A visit to Walpole Island is a unique experience. Few other places exist where one can—simultaneously—stand in the middle of a tallgrass prairie dwarfed by grasses and wildflowers 3 metres tall, gaze at rare waterfowl flying overhead, and listen to the horn of an ocean-going freighter as it glides across the horizon. It is at once a haven of natural landscape and a reminder of the many environmen-

tal impacts—both natural and human-made—that affect this territory: water-level fluctuation, water-level control, water pollution, invasive species, contaminated sediments, potential oil spills, and more.

The biological richness of the Walpole Island territory springs from its physiography as a river delta and its biogeography, situated at the northern edge of the Deciduous Forest Region (known in Ontario as the Carolinian Zone) and close to the northeastern edge of the Prairie Peninsula. For thousands of years the St. Clair River has deposited sediments that support the extensive wetlands and tributaries. The continued existence of this rich biodiversity stems from the fact that Walpole Island has been Aboriginal territory for thousands of years. Spared from the development that has befallen much of southwestern Ontario, it has benefited from the ways Native people have used the land (see "Equitably Sharing Our Knowledge and Values", page 28).

As early as 3500 years ago, Walpole Island was used on a seasonal basis by many small, related Native bands for hunting, fishing, trapping, plant gathering (for food and medication), and planting. It was not inhabited on a year-round basis until the 1820s when the settlement of Sombra Township by Canadian pioneers forced Native people off the mainland and onto the islands. Today, more than 2000 people live in Bkejwanong Territory. They are descended from the Ottawa, Ojibwa, and Potawatomi nations, joined together politically as the Council of Three Fires.

The Walpole Island people have long been known for their dedication to their land. Over a century ago, a British officer, Major John Richardson, visited the islands and wrote these words about its people: "As I contemplated this scene, and contrasted the really native dignity and simplicity of these interesting people, with the loathsome hypocrisy of civilized life, I could not but deeply deplore the fast approaching extinction, as a race, of the first lords of this soil, gentleman of nature, whose very memory will soon have passed away, leaving little or no record behind them of what they once were."

Thankfully, Major Richardson's prediction did not come true. The people of Walpole Island have survived. They continue as always to place conservation and stewardship of their natural resources as a high priority—not as an intellectual or ethical exercise but as a way of life. To them, the maintenance of biological diversity is critical to the maintenance

WALPOLE ISLAND HERITAGE CENTRE

Top left: Walpole Island First Nation is located on the Lake St Clair River delta between Lake Erie and Lake Huron. Top right: The Walpole Island Heritage Centre coordinates all requests to conduct research in the First Nation. Above: An ocean freighter travels down the St.Clair River in mid-summer, across the horizon of a Walpole Island prairie.

of cultural heritage and traditions. Plants are used for ceremonial purposes and for food. Fishing, hunting, and trapping continue to be a mainstay of their activities. But in modern times, the community has been able to integrate these uses of the wildlife resources with economically beneficial ones: leasing land to outside hunt clubs, for example, and selling Walpole Island First Nation Government licenses to non-Band members who wish to hunt or fish in Bkejwanong Territory. Many Band members earn a living as hunting or fishing guides.

The Birth of a Partnership

The ROM's association with Walpole Island began in 1996 when Erling Holm, assistant curator of fishes, was investigating a rare species, the northern madtom (see "A Fine Catch"), in the St. Clair River–Lake St. Clair–Detroit River corridor. Scientists must always obtain permission to enter and work on private or public lands. Since the Walpole Island Heritage Centre handles all research requests to work in the Walpole Island First Nation, Erling visited there to make the necessary arrangements to continue his study in Walpole waters. Quickly, he learned that making a request to this First Nation involved more than simply meeting a landowner on his driveway, explaining the project, answering some questions, and receiving permission to go back to the boat and carry on! At one time it may have been that way, but now the Heritage

A Fine Catch

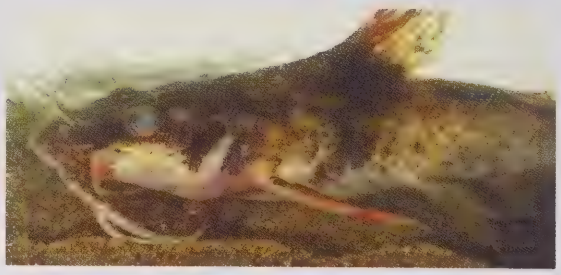
While many Great Lakes marshes have been drained for farmland or developed for residential or recreational uses, those on Bkejwanong Territory have largely been spared. Studies have revealed that among the fishes that live in the waters of Walpole are several rare species considered by the Committee on the Status of Endangered Wildlife in Canada to be at risk. The southern half of the Walpole delta consists of channels running through extensive areas of cattails, reeds, and bulrushes. Interspersed among these massive stands of emergent plants lie clear waters in embayments, ponds, and near-shore areas with dense stands of submerged aquatic plants, which provide food, shelter, and spawning habitat for a diversity of fish.

Threatened

The pugnose shiner (*Notropis anogenus*) is a small (5-6 cm long) silvery minnow with a prominent lateral stripe and a very small upturned mouth. Found primarily in the upper Mississippi River and Great Lakes drainages from North Dakota and Illinois to New York and eastern Ontario, most of its populations are in Minnesota and Wisconsin. In Canada it is still found in the St. Lawrence River, at Long Point, the Old Ausable Channel, and Lake St. Clair. It is rare globally and threatened by changes in its habitat that reduce the water clarity and number of aquatic plants. The clear, heavily vegetated waters of Walpole Island support a healthy population of this species.

ERLING HOLM, ROM

The northern madtom (*Noturus stigmosus*) is a small globally rare catfish that reaches a maximum length of 13 cm and is easily confused with juveniles of larger channel catfish, bullheads, or other more common madtoms. A pale greyish fish with darker



blotches or saddles, it is distinguished from other similar catfishes by two pale spots, one on each side in front of the dorsal fin, and pale margins to the dorsal and adipose fins. It is found in the Mississippi River system and the lower Great Lakes. In Canada it is found only in southwestern Ontario, where it is primarily concentrated in the St. Clair River, Lake St. Clair, and the Detroit River system. Although it also occurs in the Thames River, it has probably been extirpated from the Sydenham River. One specimen was captured at the north end of Lake St. Clair off Walpole Island. The male builds a nest under a rock or in a crevice and lures a female into the nest to lay her eggs. While she may stay for a while and help the male to protect the eggs and guard the

Centre staff ensure that requests from "Western" science to conduct research are received well in advance and that all requests are vetted and approved by Band Council. Why? So that scientists don't come in, do their own thing and leave—taking their data with them. As responsible stewards of their lands, the people of this First Nation must continue to learn about and have ready access to data on the resources that they hold. The Heritage Centre—Nin.Da.Waab.Jig, or "those who seek to find"—also conducts research of its own, so outside requests must fit within the context of the Heritage Centre's programs. For both these reasons, permission to carry out research on WIFN lands is granted only if it will not harm the environment, if it will benefit the community, and if community members participate in the project.

Erling was lucky. Because fish are one of WIFN's most precious resources, he obtained permission quickly, and a fishing team of three ROM staff and Kennon Johnson from the Walpole Island Heritage Centre began a three-day project. The joint ROM-Heritage Centre team worked late into the night trawling the channels and the lake in a boat with an outboard motor piloted by Kennon. After three long days the team ended its survey—without catching the northern madtom. Either the madtom was not there or its numbers were so low that it was not detected. Instead, the team made an unexpected discovery: the South Channel was full of channel darters, an rare bottom-dwelling fish that occurs from the lower Great Lakes and the St. Lawrence River south to the Mississippi River drainage to Louisiana. In

Canada it is found in southern Ontario and Quebec. At Walpole, it is found in the South Channel, where it may be threatened by the aggressive round goby.

young, she will usually leave the male to attend to the parental duties. Like most other catfish, the northern madtom is an opportunistic predator that feeds on a variety of available invertebrate foods or small fishes, including the introduced small round goby. It is not known what effect the aggressive round goby has had on northern madtoms but, unlike other benthic fishes such as the mottled sculpin and the logperch, which have declined, the northern madtom continues to persist.

The lake chubsucker (*Erimyzon sucetta*) is one of the rarest suckers in Canada. Its lips are thinner and directed farther forward than most suckers, which tend to have thick lips and a ventral "sucking" mouth. Found only in a few locations in

southwestern Ontario, it has according to recent surveys declined from Point Pelee and Rondeau Bay. The species requires quiet, clear, heavily vegetated habitat. Probably the healthiest Canadian populations occur in Walpole marshes, where we have found them to be particularly abundant in the large diked marshes. The chubsucker's tolerance for low oxygen levels may explain its abundance in the diked marshes, which likely experience regular anoxic conditions.

The channel darter (*Percina copelandi*) is a

Special Concern

The spotted sucker (*Minytrema melanops*) is another rare sucker in Canada found only in extreme southwestern Ontario. It is characterized by several rows of black spots along the sides of the body. Widespread from the lower Great Lakes to the Gulf of Mexico and in rivers flowing into the Atlantic ocean from Florida to North Carolina, its rarity in Canada results from being at the northern extremity of its range. Although not common anywhere in Canada, this fish is found in rivers and channels at sites where fish diversity is high, and thus may be an indicator of a healthy aquatic environment.

By Erling Holm

uncommon fish that is threatened in Canada.

This outcome is fairly typical of biodiversity investigations—the species you were originally looking for may remain elusive, but the discovery of a different species will spark new questions and potentially take the project in an exciting new direction. In this case it became obvious that three days of fieldwork had hardly scratched the surface of the provincial wetland evaluations that had been conducted in other parts of Lake St. Clair).

Erling, Deborah Metsger, assistant curator of Botany, and Don Stacey, technician for Invertebrate Zoology, were all interested in collaborating in a comprehensive study of the biodiversity of the Walpole wetlands that would address some of these questions. The project was a natural: it fell well within their man-

DEBORAH METSGER, ROM

P. ALLEN WOODLIFFE

Walpole Island is home to 45 species at risk in Canada. The spiny soft-shell turtle and the swamp rose mallow (top and bottom right) are both threatened species that are found in the wetlands. Top left: Dense mats of waterlilies, watershields, and other floating aquatic plants found throughout the channels and marshes provide excellent habitat for fish. Bottom left:Oligochaete worms like this clump from the family Tubificideae are abundant in lake and marsh sediments.

biological treasures that might lie in Walpole's massive coastal wetland. Was the aquatic community of the Walpole marshes different from other Great Lakes marshes? And if so, what was the reason for this difference?

Answers to these questions were not readily available. Recently, the Canadian Wildlife Service (CWS) conducted a monitoring program for populations of the king rail, a bird that has been classified by COSEWIC as a species at risk. CWS also conducted research on snapping turtle populations to determine pollution levels in the marshes. But beyond these studies and research by others on individual species, little scientific information on the diversity of fishes and other organisms found in the Walpole Island marshes existed. (Because it is under federal jurisdiction Walpole was not part of the date to fill in gaps in information on the flora and fauna of Ontario and to work toward understanding and conserving biodiversity in natural areas. It also provided a unique opportunity to do a holistic investigation that included long-term monitoring of the ecosystem. The Heritage Centre, too, was interested in gathering more scientific data on the wetlands, in order to bring knowledge of this ecosystem in line with that of the island's terrestrial ecosystems. Partnering with the ROM to study the wetlands provided an opportunity not only to make collections and gather data but also to train community members in biodiversity sampling and research techniques, expertise they could bring home.

A Profile of the Walpole Wetlands

THE AQUATIC COMMUNITIES PROJECT focused on

the 6900 hectares (17,043 acres) of wetlands that comprise the southern half of the Bkejwanong Territory. Five main channels that branch off from the St. Clair River and terminate in Lake St. Clair bisect the Walpole Island marshes. Wide and deep, the channels on a sunny day have the turquoise-blue hue of the Caribbean. The St. Clair River forms the main channel. Travel on it is shared with ocean freighters (quite frightening when viewed from a 14-foot boat), heading to and from ports throughout the Great Lakes. Historically all the channels were lined with reed beds dominated by *Scirpus* species and flanked by meadows of grasses and sedges, including Canada blue-joint *(Calamagrostis canadensis)*, lake sedge *(Carex lacustris)*, and a range of wetland herbs.

Known to the Natives as marsh hay, Canada blue-joint is hunters' preferred material for making duck blinds. In recent years, though, marsh hay has become harder to find, largely replaced by *Phragmites australis*, a tall grass that towers over the shoreline and lines ditches all over the island. One of the few plants that is native to every continent, *Phragmites* in some parts of the world is stable, with dense stands surrounded by other vegetation. But in others, particularly in regions of northeastern North America that are subject to disturbance or low water levels, *Phragmites* is one of the most problematic invasive species, crowding out other plants and often destroying valuable wildlife food and habitat. While Walpole Island has likely always had some *Phragmites*, in recent years the species seems to have spread considerably. One of the objectives of the aquatic communities project is to determine the extent of the *Phragmites* and the potential reasons for its spread, and will include studying its impact on the biodiversity of the marsh.

Shallow waters and channel edges at Walpole Island are graced by stands of bulrushes interspersed with tussocks of other vegetation. The distant shore is lined with tall stands of *Phragmites*, an invasive plant that is spreading.

Walpoles' main channels feed into a number of bays and shallow lakes, many of them containing dense stands of submerged aquatic vegetation. These aquatic plants, and the algae and microfauna that grow on them, provide food and habitat for a diversity of fish and macro-invertebrates—creatures such as midge larvae and crustaceans. As well, the plants provide refuge areas for prey species, allowing predator and prey to co-exist in the same habitat. Stands of floating aquatic plants and the shallower areas that border the marsh serve as spawning and nursery habitat for various fishes. Reed beds and emergent plants, which border the bays and lakes, are used by waterfowl for food and shelter, while the dense

stands of cattail (*Typha* species), which make up the body of the marsh between the main channels, provide excellent homes for muskrats.

But much of Walpole's cattail marsh has been cut off from the channels and open water by diking. In diked areas, ditches are dredged and the sediments from them are used to create a wall between the wetland and the open marsh. Pumps, often powered by a tractor, are used to move water between the open marsh and the diked wetlands to regulate the water levels.

Throughout the Great Lakes, water levels can fluctuate up to 1.5 metres (almost 5 feet) over many decades. Only a small proportion of this fluctuation is under human control. Under natural conditions, in high-water years the marsh vegetation migrates inland and in low-water years it moves lakeward. This long-term fluctuation helps maintain the health and diversity of the coastal marshes in the same way that the tallgrass prairie is maintained by fire (see "High Hopes for the Tallgrass Prairie," page 9)—by discouraging potentially dominant plants, like *Phragmites*, which outcompete the other species, from becoming established. In the short term, though, when water levels are low, there are fewer open ponds available in the marsh for migrating birds. Navigating in the marsh for hunting and fishing also becomes more difficult.

Beginning in the 1920s, Walpole Island First Nation began to dike portions of its wetlands to reclaim land for farmland, but by the late 1950s the practice was also intended to maintain water levels within the marshes for waterfowl. Today, diking is a major feature of the Walpole wetlands. Another objective for the Aquatic Communities project, then, is to compare the biodiversity of the open marsh with that of the diked wetlands. Where differences exist, the project will try to determine the reasons.

The Aquatic Communities Project

In 1999, The Aquatic Communities Project was launched with a 13-week comprehensive survey of fish, plants, and invertebrates. The goal was to obtain a preliminary inventory by thoroughly investigating and collecting specimens from all areas of the wetlands. By studying air photos and by talking

Equitably Sharing Our Knowledge

Last spring, on April 5th, a new Tallgrass Prairie Alcove opened in the ROM's Hands-on Biodiversity Gallery. This joint project was a first for the Walpole Island First Nation's citizens—working in partnership with the ROM, we shared in an equitable fashion our traditional ecological knowledge and values. We are very proud of that accomplishment and of our contribution to the exhibit. We trust that it will be the first, but not the last, such exhibit in partnership with the ROM.

The decision to share our traditional knowledge is significant. For many hundreds of years, our Place, Bkejwanong—the Place Where the Waters Divide—has been the soul of Indian Territory. We have remained steadfast in our stewardship of our lands and waters. Bkejwanong is endowed with a unique ecosystem of wetlands, Carolinian forests, and prairie grasslands. We are rich in fish and wildlife. "Western" scientists are even discovering that Bkejwanong has many plants and animals and birds that are common in our Place but which are considered rare in the rest of Canada. But what is really significant in the ROM exhibit is that the knowledge we share includes both our ways of knowing as well as the traditional values that are part and parcel of our understanding of how our watershed system works and how it can be enhanced as we move forward into the future together as stewards of the land.

These values are integrated into a strong cultural heritage that is celebrated by our people. We often say "all my relations,"* which in our language is *nindawemaaganidog*. In saying this word, we speak of everything that has existed in time, the known and the unknown, the unseen, the obvious, all that lived before or is living now in the worlds above and below. Indigenous knowledge comes from Places; the Names for those Places are interconnected and provide an understanding of our lands and waters and our cultures. One of the foremost strengths of our citizens, therefore, is our language—the Names of our Places and all those plants, fish, birds, and animals that reside there.

As well, we have a community that has the strength and vision to confront its development problems in a way given to us by our Creator generations ago. We view things in a holistic fashion since everything around us and ourselves is intricately interconnected. We understand these intricacies. We, as human beings, do not control the lands and waters but rather we are subject to the land's dominion. We are stewards and caretakers of the land.

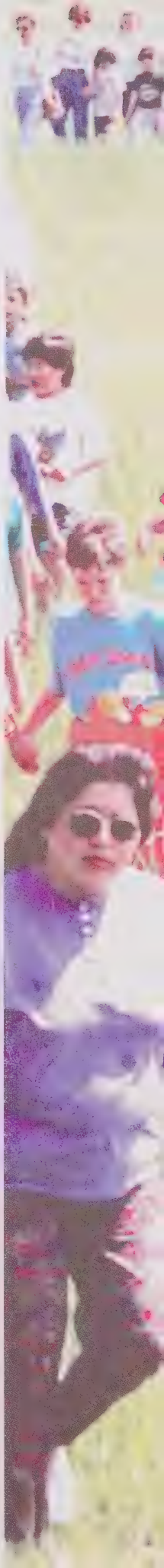
The significance of this stewardship by Canada's First Nations was succinctly highlighted more than

to Native commercial fishermen, fishing guides, and other community members with an extensive knowledge of the wetlands, researchers identified potential hot spots and areas of interest. In a society built on oral tradition the recollections of individuals are a very important source of information.

With financial support from the ROM Foundation and the Great Lakes Renewal Foundation in 1999, a resident team of three was able to work throughout the summer, surveying and processing collections. Beforehand, Heritage Centre staff attended the Fish Identification Workshop, which the ROM holds several times a year for scientists from the public and private sector. While in Toronto they also learned how to press plants, enter specimens into the database, and sort and process invertebrates. Now they were ready to process material collected in the field.

But their role on the field crew was far more extensive and valuable. They were the liaisons between the ROM team and the community—responsible for all the many logistical details from renting boats to laminating maps, finding accommodation, and ensuring that no one got lost. In mid-May the crew set up a field camp in Kewayosh Lodge, a hunting lodge built on the Chematogan Channel in 1949 by the family of Henry Ford, creator of the famous model-T car, who for many years was a regular visitor to and benefactor of Walpole Island. Throughout the summer, the ROM team joined the local crew at regular intervals to conduct focused surveys of particular groups of species.

In 1999, researchers sampled a total of 87 sites for fish, 49 sites for plants, and 21 sites for invertebrates. The fish were collected by seining, trawling, trapping, and electrofishing, depending on the nature of the site. Traversing the marsh in a boat or a canoe, field teams collected and documented the vegetation. They sorted invertebrates from bottom samples collected with an Eckman dredge. This sampling yielded a list of 59 fish species, including 6 species at risk. More than 100 species of plants, including numerous large populations of the nationally rare sedge *Eleocharis quadrangulata*, and several stands of the swamp rose mallow *Hibiscus moscheutos*, a species at risk, were found. Thirty-



and Values

15 years ago in the 1987 Brundtland Report: "Tribal and indigenous peoples will need special attention as the forces of economic development disrupt their traditional lifestyles—lifestyles that can offer modern societies many lessons in the management of resources in complex forest, mountain, and dryland ecosystems. Some are threatened with virtual extinction by insensitive development over which they have no control. Their traditional rights should be recognized and they should be given a decisive voice formulating policies about resource development in their areas." The Royal Commission Report on Aboriginal Peoples in 1996 made similar statements; unfortunately none of the recommendations have, to date, been implemented.

Although Bkejwanong in the 21st century is hemmed in by industrial developments, we continue to use our traditional knowledge and values to save ourselves. For many years we were subjected to pollution upstream from chemical plants near Sarnia—associated with the "blob" (an extremely persistent toxic cocktail of chemicals), which garnered attention as a bad-news story in the 1980s. Our citizens campaigned alone for many years to attain zero discharge because it was our drinking water that was affected, along with the plants, animals, and birds that lived with us in our Territory. Our environmental advocacy won us a United Nations award in 1995, but the battle continues. The International Joint Commission (a bi-national agency, which oversees the Great Lakes water quality and quantity) has promoted virtual elimination of toxic discharges. There has been gradual improvement in the water quality of the Great Lakes, but there is still a long way to go.

The values of protecting the land and sharing information with mutual respect are important. The process of consensus takes time, but it is well worth the effort. Our neighbours could learn from our traditional knowledge and values—how to live in a holistic way with all that interconnects and surrounds us. It is imperative—if we are going to continue to act as stewards and care responsibly for our lands and waters—that we have a dialogue, consensus, and equity as we move forward towards building a sustainable future together.

By Dean Jacobs

* Louise Erdrich, *The Last Report on the Miracles at Little No Horse*, New York, HarperCollins Publishers, 2001.

Dean M. Jacobs is executive director of Nin.Da.Waab.Jig (those who seek to find) at the Walpole Island Heritage Centre.

five species of oligochaete worms and one species of polychaete worm were identified. While there were still areas of the marsh to investigate, a couple of patterns were beginning to emerge. First, on the whole, the plant communities in the marsh were fairly uniform, but there seemed to be a marked difference in biodiversity of fish between the undiked and the diked wetlands. Second, when compared to other Great Lakes Coastal Wetlands, the species composition of the fish community was similar to the Long Point marsh but different from the Point Pelee marsh, both on Lake Erie. Why? More focused sampling was required to try to elucidate these patterns.

In the spring of 2000 the ROM received a three-year grant from the Banrock Station Wetland Foundation Canada for wetlands research, which has been directed to the Aquatic Communities of Walpole Island project. These funds enabled further fieldwork in 2001 and 2002. During those field seasons researchers completed preliminary plant surveys, carried out more extensive fish sampling in the diked wetlands, and began investigating insects in the marsh and in the prairie habitats. One of the sites originally sampled in 1999 was diked during the summer of 2001, affording an opportunity to set up some long-term monitoring plots for investigating the changes that occur within a marsh when it is diked. The resulting long-term record of changes in biodiversity will not only help the First Nation to evaluate its marsh management practices, it will also be relevant to conservation efforts in other Great Lakes Coastal Wetlands.

Fieldwork to document the biodiversity of the Walpole marshes employs a variety of collecting and processing techniques. Naomi Williams looks on as Kennan Johnson of the Walpole Island Heritage Centre weighs a pumpkinseed sunfish that was captured while electrofishing in a diked marsh.

Involving the Community, or Two-Thirds Time!

Aside from getting boats stuck in the mud and fighting off the deer flies, one of the features of conducting fieldwork on Walpole Island is regular participation in community events—and there are lots of them! (Fishing derbies, Pow Wow, Aboriginal Day, picnics, barbecues, lecture series, and more.) If there isn't an event there is a newsletter or a Web site to write something up for. All these events and communications provide opportunities for the Heritage Centre to let the community know what projects are going on, why, who's doing them, what they are finding, and what the significance is. These group events work well both as community communication and education vehicles and as forums for discussion. They give researchers an opportunity to

learn volumes about the history of the ecosystem, gather traditional knowledge, and gain community confidence. They also make you feel less conspicuous when you go to the local restaurant, the Penalty Box, for lunch! Still, despite the advantages, participating in regular community events took the ROM folk a while to get used to. Biologists in the field are renowned for starting at dawn and working till the wee hours to ensure that they cover the territory and take every advantage of their time in the field. Usually, there is little down time. Five days' fieldwork in Walpole time meant two days' community liaison for every three days' work—a factor not planned for in the first season. In subsequent seasons two-thirds time was programmed in and enjoyed.

ERLING HOLM, ROM

ERLING HOLM, ROM

DAVID BOEHM

MARK DONALDSON, BANROCK STATION WETLAND FOUNDATION CANADA

Clockwise from top left: David Boehm, leader of the 1999 field crew, sorts submerged aquatic plants. If you can't go through it, you can always go over it! The 2002 crew carry the electrofishing boat over a recently constructed dike. The ROM's Deb Metsger investigates a patch of wild rice growing in shallow embayments off Johnston Channel. Walpole's wild rice populations have spread during years of low water. Leona Crow and Jennifer Dodge, Walpole Island members of the 1999 field crew, seine for fish off the Chematogan Channel with the ROM's Erling Holm.

A Partnership That Continues to Grow

Given the diversity of the Walpole Island territory, it is not surprising that the partnership between the Heritage Centre and the ROM has grown from a focus on wetlands to include other ecosystems, and other areas of expertise. With a mandate to maintain collections and to teach, the ROM has been in a unique position to train Walpole Island staff in identifying and surveying fish, insects, reptiles and amphibians, and plants. To date, 10 people, including long-term Heritage Centre staff, have received training from the ROM.

In 2001, when the ROM began work on the tallgrass prairie and savanna exhibit, it was logical to include Walpole as a featured conservation site and to display material that had been collected there. Heritage Centre staff worked closely with ROM staff to develop interactive drawers that showcase the importance of tallgrass prairie species to Native culture. Similarly, when the Heritage Centre was approached to develop an Ecosystem Recovery Strategy for Walpole's 45 species at risk, they asked the ROM to be part of the team.

Each of these projects combines scientific resources with traditional knowledge to document the biological resources of Walpole Island with the aim of communicating the results in a way that will help to preserve the ecosystems—and the organisms that use them—for generations to come.

The children on the bus who braved snowstorms to represent Walpole Island at the ROM are the first of those generations. They will be the ones who continue to use and protect these precious ecosystems and who will keep partnerships with "Western" science growing. ■

During the late 18th century, one of Canada's premier silversmiths—who was also an astute businessman—operated the largest silver workshop in Canada at the time. Born in Scotland and trained in London, Robert Cruickshank (1743–1809) was at the forefront of style.

Cruickshank's direct familiarity with English fashion was likely instrumental to his success in Canada, since, by the end of the 18th century, English tastes prevailed in household furnishings—among Francophones as well as Anglophones. This change in taste came about after New France was ceded to England at the conclusion of the Seven Year's War in 1763. Under British governance, and with an influx of Anglophone immigrants, society was greatly transformed in that part of the colony that became known as Lower Canada (Quebec) in 1791. The new political and financial hegemony imparted an English tincture to most sectors of colonial life—

The Remarkable Legacy

Innovative in fashion and astute in business, an 18th-cen

including the styles of fine-quality household furnishings and domestic silver.

Through his silver wares, Cruickshank helped to promote the taste for things English, and his many apprentices, after leaving his workshop, continued to imitate his designs, further disseminating the fashion. Today, Cruickshank's remarkable legacy is evident in many splendid silver pieces, which have endured across the more than 200 years since he produced them.

For a craftsman whose impact on Canadian silver was so considerable, little is known about his early life. For years, Canadian scholars have speculated about Cruickshank's origins. Now, a published source previously overlooked has provided some answers.

It has long been known that Cruickshank's father, George Cruickshank, was a Presbyterian minister. An entry in the biographical dictionary of ministers of the Church of Scotland, *Fasti Ecclesiae Scoticanae* (1925), by Hew

OF ROBERT CRUICKSHANK

ry master silversmith created works of singular splendour.

Scott, overlooked until now, notes that George Cruickshank was minister of the parish of Arbroath (Aberbrothock), Forfarshire, Scotland, from 1738 until 1748, and afterwards was minister at Kinnell.

The same book recounts that George Cruickshank married Isobel Wallace in 1738. Their son Robert was born at Arbroath on April 21, 1743. But when he was only eight years old, tragedy struck the family. In 1751, Isobel died during childbirth, and just two years later George also died (of unknown causes), leaving five orphaned children. According to other late-18th-century sources, a faithful family servant, Margaret Matthew, provided for the Cruickshank orphans under desperate circumstances and at great personal sacrifice.

The next chapter in the Robert Cruickshank saga is reconstructed by Arthur Grimwade in his book *London Goldsmiths 1697–1837* (1990). On April 4, 1759, when Cruickshank was almost 17, he was apprenticed to silversmith Alexander Johnston in London. Seven years later, on April 9, 1766, he received his freedom—he had completed his apprenticeship and was licensed to set up his own workshop as a master silversmith. Just last year, a Cruickshank descendant donated the original parchment freedom papers to the McCord Museum in Montreal (see below). (The papers were first published by Robert Derome in *Les orfèvres montréalais des origines à nos jours*, 1996). This document firmly dispells earlier doubts that the Robert Cruickshank of London and the one of Montreal are one and the same person.

Old records and directories list the young Cruickshank as operating a workshop in London's Old Jewry district from 1766 until 1774; he is variously referred to as "plateworker" and "goldsmith and jeweller." Unfortunately, the register of Goldsmith's Hall for this period—which contained descriptions of silversmiths' marks approved by the guild—disappeared long ago. Grimwade suggests that a script "RC" mark appearing on London silver hallmarked between 1766 and 1772 may belong to Cruickshank. This is almost certainly the case, since it is remarkably close to the one used by Cruickshank in Canada. (Coincidentally, Cruickshank's master, Alexander Johnston, used a script "AJ" mark of similar character.)

By 1773 Cruickshank was in Montreal. It is possible that he was enticed there by merchants in the fur trade, a mainstay of the Canadian economy at the time. His services as a silversmith would have been in demand for the production of Indian trade silver—ornaments made expressly for trade with Native Peoples in exchange for furs. Most of the great players in Canada's fur trade at this time were newly arrived Scots. The merchants, including James McGill, Simon McTavish, Robert Hamilton, and Alexander Ellice, among others, remained a relatively close-knit ethnic community, although they moved easily among the broader English and French communities. While many local silversmiths would have been capable of making trade silver, which typically was of rudimentary construction, no doubt the fur merchants preferred an expert silversmith who was one of their own.

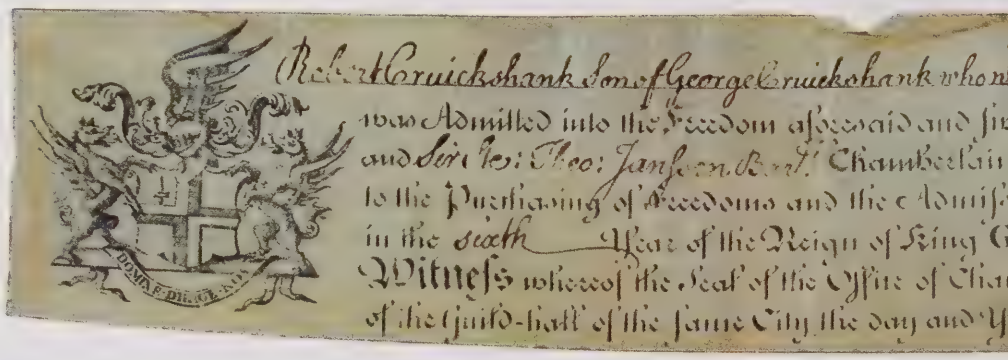
Cruickshank soon became a major producer of Indian trade silver. His commercial alliances also enabled him to expand his business to include other goods for the fur trade—essentially it was a hardware business. For a time he also employed a clock/watchmaker, indicating that he sold and repaired imported clocks and watches. Simultaneously, he ran a silver workshop where he produced flatware (cutlery) and hollowware.

Cruickshank's silver business was so good that in 1782 he built a separate workshop. Adjacent to his residence on

Below: Freedom Papers of Robert Cruickshank which read: "n. 9 / Robert Cruickshank Son of George Cruickshank who was the Appr of Alexander Johnston Cit[izen] & Goldsmith of London / was Admitted into the Freedom aforesaid and sworn in the Mayoralty of George Nelson Esquire Mayor / and Sir Ste: Theo: Janssen Bart. Chamberlain and is Entered in the book signed with the Letter B relating / to the Purchasing of Freedoms and the Admissions of freemen (to wit) The ninth day of April / in the sixth Year of the Reign of king GEORGE the Third And in the Year of our Lord 1766 / in Witness whereof the Seal of the Office of Chamberlain of the said City is hereunto affixed Dated in the Chamber / of the Guild-hall of the same City the day and Year above said." Photo: Courtesy of McCord Museum, Montreal.

Right: Portrait of Robert Cruickshank by an unidentified Canadian painter (possibly Louis-Chrétien de Heer, c. 1785–1795). Reproduced from John E. Langdon, *Canadian Silversmiths 1700–1900* (Toronto, 1966).

Previous spread: the ROM's silver tea service by Robert Cruickshank in a 19th-century Canadian setting.


Robert Cruickshank Son of George Cruickshank who
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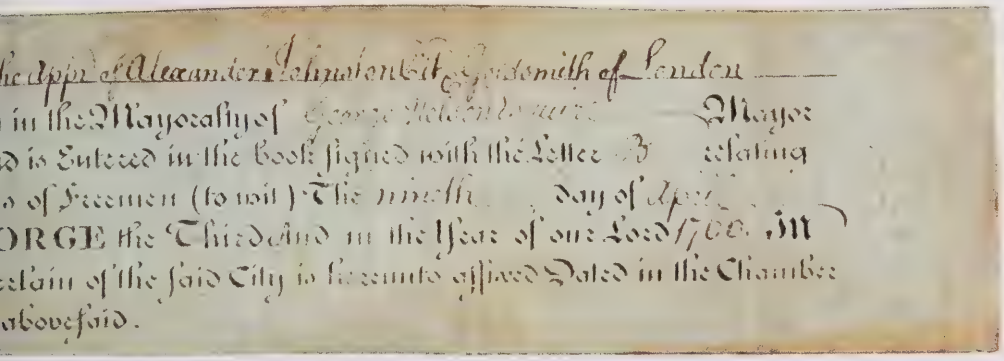
Witness whereof the Seal of the Office of
of the Guild-hall of the same City the day and

PHOTO: BRIAN BOYLE, ROM

Notre-Dame Street, the shop measured 7 by 3.6 metres (23 by 12 feet) and was equipped with a large forge. Until then, Ignace-François Delezenne in Quebec City was the only Canadian silversmith to have a separate workshop—most silversmiths worked out of their homes. Over the years, Cruickshank maintained a large operation and took on a number of apprentices. No doubt he also engaged skilled journeymen who were trained silversmiths.

Two silversmiths in particular, brothers Michael and Peter Arnoldi, were closely associated with Cruickshank. The quality and character of their work indicate strong affinities with Cruickshank. Most likely they apprenticed under him. At some point, one of the brothers and Cruickshank entered into a partnership, which ended November 1, 1784. The dissolution of Cruickshank & Arnoldi was advertised in the *Quebec Gazette* October 14, 1784. A sagacious hypothesis enunciated by Robert Derome of the Université du Québec à Montréal in 1981 (*Dictionary of Canadian Biography*) proposed that a "CA in script" mark formerly assigned to Charles Arnoldi, the younger brother of Michael and Peter who was also a silversmith, may actually belong to the partnership of Robert Cruickshank and Michael Arnoldi. The attractiveness of this theory has resulted in over-enthusiastic acceptance. There is no precedent in which two initials represent a partnership. According to English custom, which prevailed in this period, the two initials in a maker's mark signify the first initials of the first and last names of a single silversmith. A partnership would be represented with the two initials separated by an ampersand (C & A) or the first and last initials of both partners indicated one above the other (RC over CA). Aside from the lack of documentation for the "CA" attribution, the objects themselves don't suggest a Cruickshank connection. The earlier attribution of the CA mark to Charles Arnoldi would seem to be more sound.



The exact make-up of Cruickshank's workshop is not certain, but the superb craftsmanship, consistency of design, and awareness of current English fashions suggest that Cruickshank remained the dominant figure in his workshop. He was not a mere businessman and overseer. No doubt most of the hollowware was from his own hand.

A sizeable quantity of both domestic and church silver survives from Cruickshank's Canadian phase (see "High Tea," page 38). But his most striking innovations are in the realm of church silver. All the known church silver produced by Cruickshank was for Catholic destinations (see "Liturgical Legacy," page 36), with one exception: in 1786, Cruickshank made a low, footed paten for Christ Church, the Anglican parish church in Montreal, of which he was a member.

A bachelor for most of his life, Cruickshank had no children of his own. But a strong sense of family loyalties seems evident in his life; he adopted Elizabeth, the daughter of one of his brothers, and raised her as his own. In 1803, Elizabeth married a young immigrant from Aberdeen, Scotland, Arthur Webster, who was welcomed into Cruickshank's business. Cruickshank's nephew and namesake, the son of another brother, was sent to Montreal as a teenager to live with his uncle and study law. He had been born in Jamaica, where his parents owned a plantation.

In October 1807, on the eve of a trip to Britain at age 64, Cruickshank signed a power of attorney placing Webster in charge of his business affairs. He also transferred his unfulfilled contractual responsibilities for an apprentice, Narcisse Auclair, to a colleague, Nathan Starnes; this action sig-

nified the suspension of his activities as a silversmith.

Cruickshank remained in Britain for two years (the purpose of the trip is unknown) before planning his return voyage. But on April 16, 1809, just hours after boarding the ship *Eweretta*, he died. The ship was just off Portsmouth, and his body was taken to nearby Gosport and laid to rest in the graveyard of Holy Trinity Church. Cruickshank was buried by his nephew, Robert (1787–1853), who now lived in Gosport. This obituary appeared in the *Hampshire Telegraph* on April 22, 1809: "Died, on Sunday last, after a few hours' illness, on board the Eviretta [sic] at Spithead, on his passage to Quebec, Robert Cruickshank Esq. of Montreal Canada and uncle of Mr. Cruickshank of Gosport, solicitor."

Young Robert, after completing his law studies in Montreal, had been sent to Gosport in 1806 to article with a firm of attorneys. He was probably encouraged to settle there because of the town's proximity to Portsmouth, one of the busiest ports in England. In Gosport, he would have been well positioned to act as an agent for merchants and businessmen in Canada and other colonies. The younger Cruickshank's many entrepreneurial capacities earned him his own place of renown in local history. He became a highly successful real-estate developer and builder, and amassed considerable wealth. In terms of business acumen, he emulated his uncle well.

After the senior Robert Cruickshank's death, the silver dimension of his business seems to have ceased. This shift

Liturgical Legacy

The late 1700s was a period of rapid growth in the French Catholic population in Lower Canada, with many new churches being built. Once a church building was erected, a silver chalice and ciborium (vessels to hold the wine and wafer-like bread for the Mass), were priority acquisitions. As early as 1775, there is documentation for a chalice and ciborium made by Cruickshank for the Church of Saint-Michel-de-Vaudreuil (Vaudreuil-Dorion). Soon Cruickshank became the major supplier of silver to churches in the Montreal area.

No doubt Catholic liturgical vessels were unfamiliar to Cruickshank at first, in terms of both design and function. But he quickly adapted to the expectations of his clients, whose sentiments were traditionalist. He studied existing French models in churches, and then copied or carefully re-interpreted them within canonical standards, evidently with highly successful results. A chalice for the Church of Saint-Laurent (Saint Laurent) closely, but not exactly, reproduces a chalice by Parisian silversmith Guillaume Loir (active 1716–1769) for the Church of Nôtre-Dame de Montréal in 1749/50. Cruickshank's reliance on French models is also evident in a chalice for the Church of Sainte-Geneviève. It approximates still another chalice by Loir at the same church that dates to 1752/53.

A ciborium from Saint Raphael's Church in St. Raphaels, Ontario, shows Cruickshank suppressing all ornamentation in favour of starkly polished surfaces. In its pristine simplicity, this exquisitely proportioned piece lies within the mainstream of the new Neoclassical style in England. Yet echoes of Guillaume Loir and Louis XIV classical sensibilities remain.

Above: Ciborium from the workshop of Robert Cruickshank for Saint Raphael's Church, St. Raphaels.

Opposite page: Chalice from the workshop of Robert Cruickshank for the Church of Sainte-Geneviève, Quebec.

Unlike other Catholic church silver known to be made by Cruickshank, this ciborium was not destined for a French client. Small enclaves of non-French Catholics were

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away from the silver trade is reflected in an advertisement Webster placed in the *Montreal Gazette* (June 29, 1812). His varied stock included, among many things, rum, cotton fabrics, window glass, gunpowder, carpenters' and blacksmiths' tools, swords, and children's toys. The advertisement concludes with "Indian silver works, and a very general assortment of hardware, cutlery, plated ware and jewellery." By this point, the Indian trade silver was probably old surplus stock or pieces obtained from outworkers. Otherwise, the lack of mention of silver in the advertisement suggests the silver trade has been discontinued, a further indication that Robert Cruickshank was not just a merchant and master silversmith with a large workshop—a combination owner and overseer—but also the principal craftsman in that workshop.

A decline in the Cruickshank workshop by 1805 was paralleled by a growth of the rival silver workshop of Pierre Huguet *dit* Latour. Huguet soon supplanted Cruickshank as the major producer of silver in Montreal. But unlike Cruickshank, Huguet was not himself a silversmith. He was merely the owner of a silver workshop, enlisting journeymen silversmiths to do the work. These artisans could not escape Cruickshank's influence. Cruickshank left a clearly defined imprint on Huguet silver both in design and craftsmanship. In this way, the great Canadian craftsman's legacy continued long after his death, well into the 19th century.

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sprouting up at this time. The region of Glengarry, later Glengarry County, to the west of Montreal, was among the first of these, settled by Scottish Highlanders beginning in the 1780s. About 1790, Saint Raphael's Church was built by the Rev. Alastair Macdonell to serve his compatriots there. The next year, Glengarry was incorporated into Upper Canada, but as Upper Canada was in the early stages of settlement, the natural draw was toward Montreal as an established urban centre. Cruickshank had other clients in Upper Canada, too. The Agnes Etherington Art Centre has a soup ladle and two tablespoons by Cruickshank, made for Robert Macaulay (1744–1800) of Kingston.

Another ciborium by Cruickshank at the Winnipeg Art Gallery exhibits a different, somewhat old-fashioned character. Like the chalices at the Church of Saint-Laurent and the Church of Sainte-Geneviève, it more closely approximates the designs of Guillaume Loir, as in a ciborium of 1748/49 for the Church of Saint-Sulpice. Cruickshank made a similar ciborium for the Church of Sainte-Anne, Varennes, in 1803.

In 1800 Cruickshank made a sanctuary lamp for the Church of Saint-Martin, Chomedey (Laval). A substantial piece with a height of 47 cm (18½ inches), it cost the considerable sum of 1479 livres. By comparison, an average ciborium cost approximately 450 livres. Again the stark simplicity of the design is new, with the emphasis on the overall shape with harmoniously integrated proportions.

The masterwork of Cruickshank's church output is a monstrance—a receptacle in which the consecrated Host is exposed for veneration—still at the Church of Sainte-Jeanne-de-Chantal, Notre-Dame-d'Île-Perrot. Monstrances are among the most spectacular pieces of early Canadian church silver. Their purpose was to display a large Eucharistic wafer, in a reliquary-like receptacle, which takes the form of a large sunburst supported by a stem. Bright-cut garlands adorn the knops—or vasiform knobs—of the stem consisting of small, faceted gouges that create a sparkling effect. This is a particularly English engraving technique associated with Neoclassical silver for domestic use. Cruickshank was the first to introduce it in Canada, incorporating it into his church silver, which otherwise is essentially French in design.

High Tea

In the late 18th century, tea equipage became increasingly popular in Canadian society. Tea-drinking, a custom introduced by the English, soon became an important social ritual in the newly anglicized colony and was adopted even by Francophones. Cruickshank was the first Canadian silversmith to make tea silver in any quantity. Two complete Cruickshank tea services are known to scholars. The larger is a four-piece set at the Royal Ontario Museum consisting of a teapot, a tea caddy (or canister), and two footed baskets.

Until the last decade of the 18th century, in the United States as well as in Canada, tea services were usually assembled, that is, acquired piece by piece over a period of time. Rarely did pieces match. The piecemeal accumulation of tea silver indicates its status as a luxury, whereas the production of matching silver tea services reflected their growing affordability—owing both to economic prosperity and to newer and less expensive methods of silver production.

The ROM service is unusual in its components. A basic service typically includes a teapot, a cream jug, and a sugar bowl. The ROM service, in addition to the teapot, has a tea caddy and two baskets, a form commonly used to hold sugar. One basket is larger than the other. It has been suggested that the larger basket may have been a slop bowl to hold the rinsings from the tea cups. A more likely function was to hold cream, as otherwise the requisite cream container is missing.

Evidently, the ROM tea service is one of the earliest Canadian examples to be commissioned as a complete set. The sides of each piece are engraved "1797 / May." May refers to James May (1756–1829) of Detroit. This service descended directly in the May family through seven generations of daughters. Presumably it was a gift from James May to his second bride, Marguerite Descomptes *dit* Labadie, on the occasion of their marriage on September 30, 1797.

A native of England, May immigrated to Canada in 1775. Three years later he settled in Detroit where he was soon engaged in the fur trade. Beginning in 1788, he became an associate justice, and in 1805 he was appointed adjutant-general and colonel of the militia for Michigan Territory.

Cruickshank had extensive business contacts with the Upper Great Lakes region as a leading supplier of Indian trade silver to the North West Company, which controlled the fur trade in that region. Detroit functioned as a major transit point on the route westward. Commercial interaction between Montreal, Detroit, Michilimackinac (between Lake Huron and Lake Michigan), and Fort William (on Lake Superior) continued long after the American Revolution.

Evidently May was a republican sympathizer and enthusiastically took the oath of allegiance to the United States.

BRIAN BOYLE, ROM / 988.210.1-4

Above: Tea service from the workshop of Robert Cruickshank, Royal Ontario Museum.

Opposite page: Tea service from the workshop of Robert Cruickshank, National Gallery of Canada.

His disaffection with British rule seems to have originated with abuses committed by a local commandant that he had witnessed during the American Revolution.

Cruickshank also had other fur trader customers in the Detroit-Windsor area who were associated with the North West Company, including John Askin and Angus Mackintosh. Even later in life James May continued to have business dealings with the North West Company. For this reason, it is not entirely surprising that he would turn to the Montreal silversmith for his tea service, although he had become an American citizen the year before.

Another tea service by Cruickshank is housed at the National Gallery of Canada. It consists of four pieces: teapot, sugar basket, cream jug, and trivet. The teapot, with its compressed-urn shape and flanged, outspread foot, is more sophisticated than its ROM counterpart. The tall pitcher-like

The engraved monogram CL with crown, found on each piece in the service, stands for Chartier de Lotbinière. The original owner was most likely Michel-Eustache Chartier de Lotbinière. His father, Michel Chartier de Lotbinière, Marquis de Lotbinière, was ennobled by Louis XVI in 1784, in recompense for promoting the interests of France during the American Revolution. He died in 1798 and, except for living in Canada from 1790 until 1795, spent the last 27 years of his life in a largely self-imposed exile from Canada. Early on, young Michel-Eustache succeeded to his father's seigneurial estates, which were located largely in the vicinity of Montreal. He added considerably to his property and became one of the most influential seigneurs. British authorities recognized this and appointed him to the Legislative Council of Lower Canada from 1796 until his death in 1822. His social and political status notwithstanding,

THE NATIONAL GALLERY OF CANADA, OTTAWA

form of the cream jug is unusual in English silver and probably imitates ceramic cream jugs imported from England. The sugar basket is somewhat heavier in its proportions. These features exemplify a more mature development in Cruickshank's interpretation of the Neoclassical idiom and, consequently, suggest a later date for the National Gallery's service.

It belonged to Harwood descendants of the de Lotbinière family. According to the catalogue of the *Exhibition of Canadian Handicrafts* of 1905 in which it appeared, the original owner was the Marquis de Lotbinière and the service was "made of melted Spanish dollars, Montreal, 1804." This year accords with the design, which suggests a date c. 1800–1805.

Michel-Eustache refrained from using the title marquis, which he rightfully inherited from his father. No doubt he did so to dissociate himself from his father, who was patently anti-British. In 1802 he married Mary Charlotte Munro, and the Cruickshank tea service may have been a consequence of that event.

Individual surviving teapots by Cruickshank are found in the National Gallery of Canada and the New Brunswick Museum. A fifth teapot is associated with the Baby family of Windsor and Detroit. These are all oval in section, or drum-shape, and therefore of less sophisticated design, probably dating earlier than the above tea services. ■

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THE MAGAZINE OF THE ROYAL ONTARIO MUSEUM

A Fine Kettle

Identifying fossils and rocks from photos alone is a tricky business, and as our paleontologists discover, a rock in the hand is worth a dozen photos of it on the Web.

Dear ROM,

Further to a telephone conversation with you yesterday, we are attaching eight photos of what we believe to be a mammoth tooth, found on the shores of southern Lake Huron. We would appreciate it very much if you could review the photos and provide us with some information about the object we found. As I mentioned, we are trying to determine whether or not we have an object worth investigating for our son Sam's grade 7 science project.

Thank you for all your help.

Helen Kabriel and Adam Lilly

Dear Helen, Adam, and Sam,

Our combined efforts to verify the identity of your "fossil" took a couple of interesting turns before we arrived at a final conclusion. The excellent photos you supplied with your original inquiry were intriguing, and the general size and shape of the object indeed suggested a large tooth. Early in our evaluation, however, we concluded that your object was not the molar of an Ice-Age mammoth.

While such remains are known from southwestern Ontario, the fossilized teeth and bones of these animals have quite a distinctive appearance. Composed mostly of the mineral apatite, they are typically stained by chemicals while buried in sediment, which produces a dark brown, almost glossy, outer surface. As well, fossil molars almost always show remnants of the pointed root structures that once held them in the mammoth's jaw.

The photos of your object, on the other hand, showed a grey, solid structure with many of the characteristics we associate with limestone, a sedimentary rock composed of the mineral calcite. We noticed that one surface of your specimen had parallel rows of shallow, rounded pits, while an adjoining surface had a striated, wavy surface. Tentatively, we suggested that your object was a chunk of Paleozoic limestone, possibly of Ordovician or Devonian age (about 445 million to 360 million years old).

We further speculated that the textures might represent the weathering of structures known as stylolites, which form when parallel surfaces within limestone are

D. RUDKIN, ROM

29753 / K. SEYMOUR, ROM

P. VON BITTER, ROM

Top left: Kabriel and Lilly's specimen showing outer surfaces, including radiating calcite crystals. **Top right:** Fossil mammoth tooth. **Bottom:** "Kettle" in situ at Kettle Point, with Janet Waddington of ROM's Palaeobiology Department for scale.

DAVID RUDKIN & KEVIN SEYMOUR

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partly dissolved under pressure. We weren't certain, however. For one thing, the best examples come from Ordovician-age outcrops east of the Niagara Escarpment. Although good Devonian examples are known from southern Lake Huron, these didn't quite match your specimen. We decided that a final identification should be based on the object itself. You very kindly brought your specimen to the ROM for closer examination.

As soon as we had it in our hands we realized the true identity of your object. Although most of our initial response still stands—your object is not a fossil, and it is indeed a piece of Devonian limestone—your object is not a stylolitic piece as we supposed. It is a water-worn fragment of a large limestone concretion, known colloquially as a "kettle." Originally, it came from the black, organic-rich Upper Devonian shales named the Kettle Point Formation, which outcrops along the southeastern shores of Lake Huron.

These concretions are impressive spherical masses up to a metre in diameter, which "grew" about 360 million years ago through the precipitation of calcite and other minerals in the muddy bottom of a shallow Devonian sea. Today, as the soft shales erode along the shoreline, "kettles" are occasionally exposed to the elements and broken up by waves and ice. Fragments, such as the one you found, may show up on beaches well away from the original outcrop area.

The inner structure of the strange concretions is composed of outwardly radiating "fibrous" calcite crystals, and the outer surface is frequently pitted—two of the features we saw in your photos. The best place to view these amazing kettles still in place is at Kettle Point, a provincial historic site within the Kettle Point Indian Reserve. (No collecting is permitted.)

Thanks again for allowing us to examine your object.

David Rudkin and Dr. Kevin Seymour are assistant curators in the Museum's Department of Palaeobiology.

An Air Of Distortion

Identifying the culprit behind the shrinking, cracking, and swelling of wood furniture, panelling, and other wood items.

2001.119.1 / BRIAN BOYLE, ROM

This chair by Charles Rennie Mackintosh has a horizontal crack at seat height caused by wood shrinkage across the grain.

DOUGLAS CONVERSE

Last summer, a friend of mine converted his old garage and tool shed into a snug guest-house. Proudly he boasted about how in the hot, muggy weather he had painstakingly installed piece after piece of two-inch tongue-and-groove pine panelling. The place sounded great. He invited me to come and stay for a few days, but both our schedules were so busy that it wasn't until mid-winter that I was able to make the trip. When I arrived, I was shocked at the work he had been so anxious to show me. There were big gaps between the wood slats—up to a quarter inch in places. My friend vowed that it had been perfect in the summer. He couldn't figure out what had happened.

The problem affecting the wood in my friend's guest-house is the same one that affects all wood objects, including those on display or in storage at museums such as the ROM: drastic changes in relative humidity.

"Relative humidity" expresses how much moisture is contained in a volume of air compared to the total

amount of moisture the air could hold at a given temperature. The higher the temperature, the more moisture air can hold. That's why the weather is often so humid in summer—warmer summer air can hold more moisture. So if you took cold air with 80 percent relative humidity from outside in the winter, for example, brought it inside, and heated it up, the relative humidity would drop. While the amount of moisture remains constant, the warmer air inside can hold more moisture. This is why moisture content is expressed in relative terms.

Organic materials such as wood and paper respond to changes in the air's relative humidity. These materials will dry out and shrink if the RH is low, but will absorb moisture and swell if the RH is high. To further complicate the situation, wood shrinks at different rates in different directions, a property known as anisotropy. If you think about a cross-section of a tree trunk, the wood shrinks in these ways: 6 percent across the grain; 10 percent around the circumference of the trunk; and only 0.1 percent in the direction of the grain. These different shrinkage rates may cause problems for wooden objects.

In the past, many of the objects in the ROM's collections suffered from uncontrolled relative humidity; this is why conservators are now strict in their recommendations for controls. A chair designed by Charles Rennie Mackintosh, currently on display in the ROM's European Galleries, is a very good example of how changes in relative humidity can damage an object.

The Mackintosh chair was designed and built with wide, thin panels of oak fixed at either end; unfortunately, this structure does not allow for movement as the wood shrinks or swells with changing humidity. When enough internal stress built up as the wood shrank, the panel cracked. Marianne Webb, decorative arts conservator at the ROM, has seen a number of these chairs; most of them are cracked in exactly the same way.

Another example of the damage caused by low relative humidity is a small drinking vessel, or "cog," that was featured in a ROM Answers article

BRIAN BOYLE, ROM

930.15.23 / MARIANNE WEBB, ROM

The willow bindings have fallen off this Scottish cog because the sycamore and walnut staves shrank across the grain, making the cog's circumference smaller, while the lengthwise grain of the willow binding remained unchanged.

by Peter Kaellgren in the Spring 2002 *Rotunda*. The bowl is constructed of a series of sycamore and walnut slats placed vertically, and bound with willow strips. As the RH decreased, the slats shrank enough for the wood binding rings to fall off. This illustrates how the vertical slats shrank more across the grain than the willow strips shrank in the direction of the grain.

Most wood objects can withstand some change in RH. The ideal relative humidity for storing wood objects, whether in a museum or at home, is 50 percent. But even in conditions where the relative humidity ranges from 35 to 75 percent, wood can be kept free of damage. Only when RH drops below 35 percent is wood permanently deformed. When it becomes this dry, the cell walls collapse and never regain their full size, even if the RH increases again. Too much moisture can also permanently damage wood: a similar permanent distortion in the cell walls occurs at RH levels above 75 percent.

During winters in Canada, the relative humidity in an average heated home is somewhere between 15 and 25 percent. This means that wood furniture and other wood items are at risk of damage. Wood joints may loosen, or thin wooden panels on cabinets may crack or warp. To prevent permanent damage, collectors should use a humidifier in winter to maintain an RH level above 35 percent. Consistency is important; don't forget to check and refill the humidifier before it becomes empty. Sudden drops in RH can also cause damage, especially in painted wood. As the wood shrinks or expands, the paint on its surface will react at a different rate, which may cause cleavage between the paint and wood layers.

The ROM's exhibit galleries are climate-controlled, where possible, for an RH level of between 35 and 50 percent. Some objects require more strict control; inlaid or gilded wood, for example, and Oriental lacquer are stored and displayed in an environment with RH controlled to 50 percent year round.

As for my friend's guest-house, the panelling returned almost to its original width in the warmer and moister weather this past summer. I suggested that he install a humidifier for the winter. Not only will it keep his pine panelling from shrinking, perhaps permanently, it will also make the air more comfortable for guests.

Douglas Converse is an author with a keen interest in conservation.

The Crockery Merchant of King Street West

In 19th-century Toronto, one store was known as the place to buy fine-quality ceramics.

Dear ROM Answers,

My grandmother has an old dinner service that she inherited from her own grandmother. There are inscriptions on the underside of the pieces. "China Hall" is written within the outline of a pitcher, and below are the words "China Hall, 49 King St., Toronto." There are also the letters "H & Co" over "L." I never realized that such fine china was being produced in Canada. Can you tell me more about the maker?

K. T.
Niagara-on-the-Lake, Ontario

Dear Reader,

At the risk of disappointing you, your grandmother's dinner service was not made in Canada. It was made by Haviland & Co. of Limoges, France. The mark with the King Street address belongs to Glover Harrison, a Toronto retailer of ceramics or, in the parlance of the day, a crockery merchant. His specialty was fine-quality china and earthenware, which he supplied to both wholesale and retail business. Even in the late 19th century, most high-quality ceramics used in Canada were imported.

Marks comparable to those on your grandmother's service, which is made of porcelain, are illustrated on a porcelain butter pat from the ROM's collection, though the "China Hall in a jug" mark was also commonly applied to other wares marketed by Harrison, for instance, English ironstone. The jug was the registered mark of Glover Harrison; a jug-shaped sign hung over the front entrance of his store. Called China Hall, it was located at 49 King Street East from 1864 to 1866, at 71-73 King Street East from 1866 to 1879, and again at 49 King Street East from 1880 to 1899. The Haviland & Co. mark on your grandmother's service was in use from 1876 until 1889. The marks of both maker and retailer put the date of your grandmother's service in the 1880s.

986.404.25 & 2002.33.1 / BRIAN BOYLE, ROM

Above: This mark on a porcelain butter pat from the ROM's collection is that of Glover Harrison. The piece was made by Haviland & Co. of Limoges, France. Bequest of Mrs. Mary Bieniewski.

Below: This mark of Harrison's is on an ironstone dinner plate made in England. Gift of Clayton Shields in memory of Elizabeth Collard. ROM.

ROSS FOX

The late Elizabeth Collard, the esteemed authority on Canadian ceramics, mentions Glover Harrison in her book *Nineteenth-Century Pottery and Porcelain in Canada* (2nd edition, McGill-Queen's University Press, 1984). It is the chief published source on Harrison's activity, but I have managed to glean some additional details about Harrison among archival documents, city directories, censuses, cemetery records, newspapers, and publications from his time.

Harrison was born in Carrick-on-Shannon, County Leitrim, Ireland, on March 28, 1825. At 17 years of age he was sent to the nearby town of Sligo to learn the "china, glass, and crockery trade." When the great famine struck Ireland in 1847, Harrison and his family joined the tidal wave of Irish refugees who sought a new life in North America. The Harrisons emigrated to Toronto.

Several years passed before Glover Harrison re-entered the ceramics trade. Then, in 1855, he was hired by William Thomson (Thomson & Burns), a retailer of hardware and crockery. In 1864, Thomson provided Harrison with the financial backing to set up his own business, and Harrison founded China Hall. He credited the early success of his business to gentry displaced by the Civil War from the American Confed-

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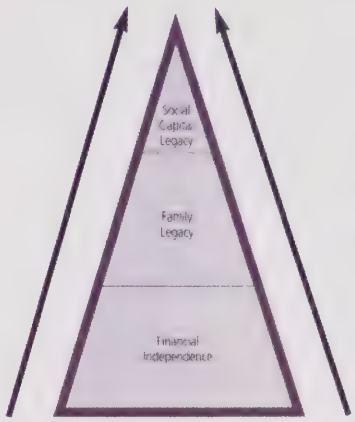

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erate states. According to Harrison, "they had refined taste and bought only the best and finest goods."

Harrison himself played a major role in shaping the taste of Upper Canadians when it came to fine-quality ceramics. By 1886, *A Cyclopaedia of Canadian Biography* stated that "his business has increased and prospered until now it is the choicest and the largest in Toronto, or in the Dominion." He succeeded in impressing no less a personality than Princess Louise, daughter of Queen Victoria. While visiting the Toronto Industrial Exhibition (now known as the Canadian National Exhibition) in 1879, she admired Harrison's display and even purchased a set of ironstone jugs from him.

Harrison maintained the high quality of his stock by personally selecting his wares on annual buying trips. He visited England and France regularly, and his itinerary often included Germany, Ireland, and Scotland as well. C. Pelham Mulvany remarked in *Toronto: Past and Present* (1884): "The imported goods are brought direct from the most noted manufacturers of Europe." These included Royal Worcester, Derby, Minton, Doulton, Copeland, and Wedgwood from England, Limoges and Sèvres from France, Meissen from Germany, and Beleek from Ireland. Harrison also carried Chinese and Japanese ceramics.

In the early 19th century, imports from England and Scotland dominated the Canadian pottery market, although later there was strong competition from France. Limoges was a leading pottery-making centre. In 1841, David Haviland, a prominent New York china dealer, was attracted to Limoges by the extraordinary quality of its porcelain and founded Haviland & Co. there. French manufacturers were unwilling to accommodate American tastes in design, so Haviland, who understood his market well, remedied that himself. He succeeded in becoming the leading maker of porcelain for the American market. The fashion caught on with Canadians and Haviland porcelain became the most popular of the higher-priced wares in Canada. In the words of Elizabeth Collard, "To own a set of 'Haviland Limoges' became the goal of housewives in Victorian Canada."

Glover Harrison died March 12, 1888. His will indicates an exceptional generosity of spirit. Never married, Harrison ensured that everyone in his extended family received something of his legacy. His business was continued under the management of his nephew, Henry Pierce Harrison, until the latter's death in 1892. Subsequently, Joseph Irving became the owner of China Hall.

Glover Harrison's China Hall represented the highest standards for ceramics in Canada; your grandmother's service represents the best of Harrison's wares.

Dr. Ross Fox specializes in Canadian decorative arts in the ROM's Department of Western Art and Culture.

WE'D LIKE TO HEAR FROM YOU

If you own furniture, silver, glass, metalwork, ceramics, textiles, or small decorative objects that may have an interesting past and have aroused your curiosity, this column is for you. Send a clear colour photograph (or 35-mm colour slide) of the object against a simple background, providing dimensions, a description, any markings, or any known details of its history to: ROM Answers, c/o *Rotunda* magazine, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario M5S 2C6. Be sure to enclose a stamped, self-addressed envelope large enough to include any photos that must be returned to you.

Neither *Rotunda* nor the author nor any other person who may be consulted assumes any legal responsibility for these opinions or their ramifications. No financial appraisals will be offered.

Letters will be acknowledged as staff time permits.

Greeting card of *Madonna and Child* Tondo in glazed terra cotta, attributed to Andrea della Robbia, 1480–1500.

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ROM ARCHIVES

JULIA MATTHEWS

In the early 1930s, a house near the southwest corner of Bloor Street and Queen's Park was demolished to make way for the first expansion of the Royal Ontario Museum. The 1931/33 wing, running north-south along Queen's Park, contains what is presently the Museum's main entrance and the rotunda. The addition completed the ROM's "H" shape when joined to the original 1912 building, which runs along Philosophers' Walk.

In the photo above you can see the Park Plaza Hotel (now the Park Hyatt) almost ready to open and the Church of the Redeemer on the north side of Bloor Street, and in the distance, the fire-hall tower on Yorkville, the medical offices at Belair (now demolished), and the hills of Rosedale. Across Queen's Park is the Lillian Massey Building (Department of Household Science), which today houses the Ontario Ombudsman and Club Monaco.

Beginning next May, the view at Bloor and Queen's Park will be transformed once again as the ROM prepares to build Daniel Libeskind's new crystal design.

Julia Matthews is head of the ROM's Library and Archives.

If you remember an occasion at the ROM or an exhibition that has stayed with you across the years, send us your reminiscences at info@rom.on.ca.

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